PROGRESS REPORT

ON

ARBORICULTURE IN THE PUNJAB

For the year 1885-86.

No. 460.

FROM

T. GORDON WALKER, ESQUIRE,

Offg. Junior Secretary to Government,

Punjab and its Dependencies,

To

H. C. HILL, ESQUIRE,

Offg. Conservator of Forests,

Punjab.

Dated Lahore, 11th November 1886.

Forests.

SIR,

I AM directed to acknowledge the receipt of your letter No. 1362, dated 20th September 1886, submitting five tabular statements showing the progress of arboriculture in the Punjab during the year 1885-86, with brief notes recorded in the column of remarks. In reply I am to convey the following observations of the Lieutenant-Governor.

2. The report, which was due on September 1st, was not despatched till September 20th, and was received in this office on October 9th. It is explained that the statements from certain districts, which should have been submitted by July 1st, were not received till after August 15th, thus causing delay in the submission of the returns for the Province. The report required for this year is of the briefest possible description, and I am to call your attention to paragraph 7 of the review of last year, and to request that in future all instances of the unpunctual submission of these statements may be brought to the notice of Government.

3. The rainfall of the year appears to have been considerably above the average. The only districts among those classed as *arid* in which there has been a diminished rainfall are Montgomery and Ferozepore; in all the *very dry* districts it has been above the average; and in only seven of the remaining districts of the Province has the rainfall been somewhat less than usual. It is partly in consequence of these favorable conditions that the length of single lines of avenues planted during the year shows a considerable increase over the figures returned for the previous year, the total this year being 50,72,717 feet against 18,40,373 feet for 1884-85. But it also appears from the remarks recorded against the figures of certain districts that this large increase in the returns of lengths planted is due chiefly to more careful measurements, and to the inclusion of lengths of avenues previously planted, but excluded from former returns. If allowance be made for this, according to the entries in the column of remarks in Statement No. I (*a*), the total length of single lines of avenues actually planted during the year amounts to 25,33,746 feet. The loss of 9,14,033 feet of trees in the Kángra District, commented upon in last year's review, is now explained as being erroneous, and it is stated that no such loss occurred. The figures of length of lines on which trees have been lost this year are high in Lahore and Delhi, being 4,04,710

feet and 3,13,330 feet respectively. These figures obviously called for explanation in the column of remarks. Commendable activity in the planting of avenues appears from the returns to have been exhibited in several districts, and the Lieutenant-Governor is pleased to observe the increased interest shown by District Officers generally in the subject of arboriculture. Statements I and II submitted from Amritsar are blank, and the returns are otherwise imperfect. The attention of the Deputy Commissioner of that district will be drawn to the matter, and he will be asked to see that complete returns are submitted for the future.

4. Remarks similar to those made in the last paragraph regarding the inaccuracy of previous returns apply to the operations shown under the heads of Groves and Nurseries in Statements II and III, the increases of area being in great part nominal, and merely the result of omission from the returns of the preceding year. It is hoped that some degree of accuracy has now been attained, and that the future returns will show the actual progress of each year.

5. The Lieutenant-Governor is glad to observe that the subject of fodder trees appears to have received considerable attention, and that, although primary attention is directed to obtaining trees for shelter purposes on district roads, fodder trees are extensively planted in almost all districts where the necessity is likely to make itself felt. The entries in column VI of Statements I—III show that a number of trees which could be utilized for fodder are planted generally throughout the Province. Experiments have been tried this year with the salt bush in several districts, but the result has not yet been reported to Government; the only mention of it in the present statements is from Dera Gházi Khan, where it is said the seed did not germinate. As stated in the concluding paragraph of your remarks, a fuller report on the subject of fodder trees should be given in the next narrative report.

6. The following table shows the expenditure, income, and net cost of arboriculture in the districts of the Province during the past five years :—

	Expenditure.	*Income.*	*Net Cost.*
	Rs.	Rs.	Rs.
1881-82	1,07,886	35,478	72,408
1882-83	99,581	32,864	66,717
1883-84	1,39,804	50,944	88,860
1884-85	1,24,262	51,948	72,314
1885-86	1,56,317	66,256	90,061

The figures for last year are approximate, as the returns for five districts were not included owing to late submission, those for 1883-84 being substituted. It will be seen that, while the expenditure and income have both largely increased, the net cost of arboriculture in the year under review, though it considerably exceeds the figures of last year which were only approximate, is greater than the net cost for 1883-84 by only Rs. 1,201; and, if the increased extent of arboricultural operations this year be taken into consideration, the financial results do not compare unfavorably with those attained in previous years.

I have, &c.,

T. GORDON WALKER,

Offg. Junior Secretary to Government, Punjab.

Punjab Government Press, Lahore.—8-11-86—332.

No. 1362.

FROM

H. C. HILL, ESQUIRE,

Conservator of Forests, Punjab,

To

THE JUNIOR SECRETARY TO GOVERNMENT,

PUNJAB.

Dated 20th September 1886.

SIR,

I have the honor of submitting herewith five tabular statements (noted at foot) showing the progress of arboriculture in the Punjab during the year 1885-86.

2. The delay in submission of these statements is entirely due to my not receiving the statements for some districts till after the 15th August, instead of on the 1st July.

3. The heavy loss of plants noticed in the Kangra district in 1884-85 has been briefly remarked on in the statements as was requested.

4. Some notice in the remarks columns has been given to the question "whether fodder trees are propagated in the districts with a view to the supply of fodder in the time of famine." It would appear from the names of trees entered in columns 6 of statements I, II and III, that there are many fodder trees planted; and generally it is reported that though primary attention is directed to obtaining trees for shelter purposes on district roads, nevertheless fodder trees have been and are still planted in almost all districts where the necessity makes itself felt. In many instances those already planted furnished fodder during the last famine. This matter will be dealt with more fully in the next narrative report.

Statement	I a.—Avenues.	(Districts).
Do.	,, b.— ,,	(Canals).
Do.	,, c.— ,,	(Provincial roads).
Do.	II a.—Groves.	(Districts).
Do.	,, b.— ,,	(Canals).
Do.	,, c.— ,,	(Provincial roads).
Do.	III a.—Nurseries.	(Districts).
Do.	,, b.— ,,	(Canals).
Do.	,, c.— ,,	(Provincial roads).
Do.	IV a.—Income.	(Districts).
Do.	,, b.— ,,	(Canals).
Do.	,, c.— ,,	(Provincial roads).
Do.	V a.—Expenditure.	(Districts).
Do.	,, b.— ,,	(Canals).
Do.	,, c.— ,,	(Provincial roads).

I have the honor to be,

Sir,

Your most obedient servant,

H. C. HILL,

Offg. Conservator of Forests, Punjab.

20. 9·88 miles of avenues were planted up in the Kohát district during the triennial period, of which 4·80 miles failed, the length of avenues fully stocked now amounting to 10·29 miles out of 14·32 miles suitable for avenues.

21. During the years under report 14 miles of avenues were planted with trees in the Rohtak district, of which 3·5 miles failed, leaving 196·93 miles stocked with trees at the end of 1895-96 out of 415·08 miles suitable for avenues. Altogether 7,469 plants were put out, of which 21·9 per cent. failed, the figures for the previous period being 16,351 and 16·2 respectively. The plants are kept in the nursery till they are 3 to 5 feet high. They are transplanted partly in the spring, *i.e.*, 15th February to the end of March, and partly in the rainy season.

22. In the Lahore district the work done consisted principally in the maintenance of existing avenues. However, 40·062 miles were planted up, including 10·46 miles transferred to the Lahore Provincial Division. Thus the total length of avenues fully stocked amounts to nearly 229·69 miles, while 83·72 miles still remain to be planted up.

23. Arboriculture operations were not attended with great success in the Karnál district. 1,350 plants were put out and in addition 1,653 were planted to fill up gaps, whilst 2,714 plants failed. However, a net addition of 3·51 miles was made to the length of avenues, bringing the total up to 81·30 miles out of 241·70 miles suitable for avenues.

Dry Districts.

24. 43·708 miles were newly planted in the Jhelum district, of which 3·002 failed. The total length of avenues planted up amounts now to nearly 330 90 miles out of 422·53 suitable for avenues. Altogether 9,736 plants were put out, of which 8 per cent. failed, against 16 per cent. in the previous triennial period.

25. During the first two years 56·55 miles of avenues were planted up in the Gujránwála district, of which 4·59 miles failed. 27 roads with a length of 164·99 miles are now fully stocked with trees out of a total length of 457·83 suitable for avenues. In the Háfizabad and Khángah Dográn tahsíls the plants are irrigated from the Chenáb Canal, elsewhere *bhistís* are employed. *Kíkar*, *shísham* and *frásh* are said to be the most suitable species for this district, but only the two former are now planted.

26. In the Gurgáon district very poor results have been obtained during the triennial period, but no explanation is given in the Deputy Commissioner's report. In the previous period also arboricultural operations were not very successful. In 1893-94 6·9 miles were planted, of which 3 miles failed, in 1894-95 only one mile was successful out of 18 miles planted, and in 1895-96 0·75 miles out of 1¼ mile. Thus about 5·65 miles have been added to the length of avenues fully stocked, bringing up the total to 259·45 miles out of 396·15 miles suitable for avenues.

27. The percentage of failure is also very high in the Amritsar district, *e.g.*, 10,113 plants failed out of 13,750 put out; nevertheless the length of avenues under the District Board was increased by 4·66 miles, and that under the Municipality by 2·85 miles, bringing up the total length fully stocked to 172·5 and 51·1 miles, respectively.

28. In Delhi too arboricultural operations were not very successful. 46·94 miles of new avenues were planted and 47·3 miles failed, giving a net decrease of 0·36 mile, whereas in the previous period there was an increase of 75·29 miles on district roads and 25 miles in the municipality. The failures were principally in the *kíkar* sowings on unmetalled roads, and are said to be due, in the first two years to bad soil and floods, and in the third year to drought. Plants put out from nurseries gave fairly good results. Full details of the work done are given in the Deputy Commissioner's report.

29. 6¼ miles were planted up in Jalandhar during the three years. There are now some 225 miles of avenues to look after, and the District Board is unable to do much towards their extension, owing to want of funds and suitable establishment.

30. Arboriculture operations in the Ludhiána district have been more successful than in the four districts mentioned above. Altogether 8,121 plants were put out along 21·12 miles of roads, while 3,932 were planted to fill up gaps. *Shísham* is the species chiefly planted, but during the last two years 500 mango plants have been grown and are doing well. No attempts have as yet been made to plant *kíkar*, which grows plentifully in this district and reaches a large size. About 30 miles still remain to be planted.

31. The report of the Ráwalpindi district gives no details of the work done, but according to Statement No. V 11·99 miles were planted up and 17·38 miles failed, the length of avenue now fully stocked amounting to 335·79 miles.

Fairly Moist Districts.

32. During the period under report 37,712 plants were put out on 50·48 miles of avenues of the Gujrát district, of which 34·23 miles failed. A large number of trees were blown down by storms in 1894. These are probably trees that have been girdled by villagers, referred to in paragraph 33 of last report.

33. The length of avenues fully stocked in the Gurdáspur district at the end of 1895-96 amounted to 466 miles out of 605·39 suitable for avenues, compared with 426·8 at the end of the last triennial period.

34. There were only 196·28 miles of avenues in the Ambála district at the close of the period, compared with 323·99 at the end of the former period. This large difference is due to (1) the transfer of 28 miles of road to the Public Works Department, (2) mistakes in the calculation of the lengths of roads, 50 miles, (3) failures and incorrect returns submitted at the end of last period, 48 miles. The present figure has been arrived at after reference to the Tahsíldárs. The Deputy Commissioner gives figures for the number of trees in the different avenues, adding that they have been calculated in his office, and asks whether it is desirable that trees in avenues should be counted. There seems to be no object in this. All we want to know is the progress that has been made, *i.e.*, the length of avenue planted and that has still to be planted, &c., *i.e.*, what can be shown in Statement No. V. Figures for the number of trees planted do not convey any very definite impression, the plants are put out at different distances apart and there may be only one, or two or more, lines of trees.

35. 62·25 miles have been successfully planted during the three years in the Siálkot district, bringing up the total fully stocked to 541·74 miles out of a total length of 838½ miles suitable for avenues. But besides this several miles of inner lines of trees have been planted on various roads. The remarks of the Deputy Commissioner regarding the species planted are interesting. As in other districts *shísham* and *kíkar* are preferred. The further planting of *siris*, *ber* and *bakáin* has been discontinued. The two former are lopped and disfigured by goat herds, whilst the latter is short lived and gives little shade, and is therefore unsuitable for avenue planting.

36. During the period 6·34 miles of avenues were planted with trees in accordance with the plan of operations sanctioned for the Hoshiárpur district; the plan has now come to an end. 29,981 plants have been put out of fourteen different kinds, the majority being *shísham*, and the next most numerous mango and *pípal*. All the principal main roads have now avenues along them. Rules, regarding the manner in which roadside trees should be pruned, have been issued by the Deputy Commissioner. The latter reports that of late years there have been many disputes, especially in the civil station, regarding the ownership of roadside trees, which have been planted and cared for by the

District Board, and which are now full grown and of considerable value. No claims were put forward while the trees were young and useless. It appears that, when the avenues were first laid out, little regard was paid to the question as to whether the land belonged to the villagers or to the District Board.

37. In the Simla district 2·66 miles have been planted near Kálka; elsewhere the roads are too hilly for avenues.

38. Most of the roads of the Hazára district also are in hilly tracts, where tree-planting is unnecessary, or very difficult. A few miles of road were newly planted, but the work done during the period has consisted mostly in filling up gaps.

39. 49·615 miles were successfully planted in the Kángra district, or about the same length as in the previous triennial period. The percentage of failure was higher, *viz.*, nearly 55 per cent. against 43 per cent. This was probably due to attempting too much in 1893-94, when nearly 67 miles were planted, of which 39 miles failed. No arboricultural operations were carried on in the Kulu Sub-Division.

II.—Groves and Plantations.

40. 4·52 acres were added to the area under groves in the Muzaffargarh district, while 1·23 acres failed. Fruit trees were planted in the Muzaffargarh tahsíl compound and the Alípur Munsiff's Court compound. In Multan and Dera Gházi Khan there was no alteration in the area of groves and plantations, but in the latter district the Khánwah plantation is being extended.

41. 4·9 acres of groves failed in Dera Ismail Khan, owing to low water in the River Indus. The area under this head now amounts to 12·6 acres. There was no change of area in Montgomery. The existing trees are grown up, and are mostly *kíkar*, *shísham*, *ber* and *siris*.

42. The Sahjawál plantation is the only important one in the Jhang district. It is situated on the left bank of the River Jhelum on fertile soil, and furnishes timber, grass and *munj*. The Bela Baggar plantation only contains a few *shísham* trees. It was damaged by the River Indus some years ago. In the Bannu district 1,192·66 acres are under *shísham* plantation, but it is believed that only about 500 are fully stocked.

43. The area under groves has largely increased in the Shahpur district, since canal irrigation has become possible.

In the Hissár district 72·51 acres of the Hánsi Bir have been newly planted, and 5·9 acres have failed. The area under groves was added to by the transfer of 163·24 acres from nurseries and 22·04 from plantations, while 21·44 acres failed. The Kehruwála plantation of the Ferozepore district is in a flourishing condition, and the Mamdot plantation is also doing well, as it is irrigable from a branch of one of the inundation canals.

44. About 2 acres of land under nurseries in the Pesháwar district were transferred to groves. There was no alteration of area in the Rohtak district. The 30 acres sown with *kíkar*, referred to in the last report, have failed, owing to drought. There are 15 groves in the Karnál district with an area of 317·37 acres. 614 plants were put out and 720 died, leaving 3,198 trees and plants alive at the end of the period. In the Gujránwála district 1·51 acre was transferred from nurseries to groves.

45. The area taken up for plantations in the Gurgáon district is 2,156 acres, of which 114·8 acres were stocked at the beginning of the triennial period. 13½ acres were planted in 1894-95 at Banjar Guráora in the Rewári Tahsíl, but owing to drought this operation was a failure. In the following year a further trial was made with no better result, due to the difficulty of supervising the watering of the plants.

46. In the Tilauri rakh of the Delhi district 140 acres were sown up with *kíkar*, and 180 acres failed, owing to floods from the Jumna river. 7·49 acres of *bunds* were also sown up with *kíkar*, of which 2·87 failed, owing to damage done by cattle and drought. Thus there was a decrease of 35 acres, compared with an increase of 34 in the previous period. A grove of prickly pear was formed on the ridge at Delhi, and 6 new groves were planted in different parts of the district.

47. In Jalandhar the plantations, which contain *shísham* and *kíkar*, are situated on low-lying ground near the Sutlej and are liable to inundation. Three plantations, with an area of 37·57 acres, were cut down and the trees sold, as they were in danger of being washed away by floods. 45 acres were leased for cultivation, the trees having been felled in previous years. The area under this head now amounts to 81·43 acres. One acre was added to the area under groves in the Ludhiána district, and a further addition of 108·06 is due to omissions in previous returns.

In the Gujrát district the area under groves at the end of 1896 was 176·82 acres, while 0·48 acre was added to the area under plantations.

48. There was a small addition to groves in the Gurdáspur district in consequence of plants in nurseries having become too large to transplant. 112·90 acres were shown under groves in the Ambála district at the end of the last period, but the returns have been corrected after reference to the Tahsíldárs, and the acreage is now reduced to 18·94 acres by the omission of areas that could not properly be classed as groves. 2 acres of land, reclaimed from the Aik *naddi* near Siálkot, have been planted with *shísham*, which are in a promising condition. A small area was also added to groves by transfers from nurseries.

49. There was no alteration of area in Hoshiárpur. It is proposed to cut down a grove of old mango trees in the station garden, which bring in no appreciable revenue, and to convert it into a nursery, where trees will be raised and distributed to *zamíndárs*. The encamping-ground at Kálka, area 13·62 acres, is the only grove in the Simla district.

50. Trees were planted on a *bund* near the Harípur-Serái Kála road of Hazára, and are doing well. A large number of plants are put out every year in the Sarban and Abbottabad rakhs, but very few succeed, owing to the scarcity of water in the hot weather. Existing trees are said to be in a flourishing condition. 6 acres were added to the tahsíl garden at Pálampur in the Kángra district and planted with fruit trees received from the Simla gardens. The grove on the Núrpur dâk bungalow hill has not been a success. The soil is very shallow, a sheet of impermeable rock occurring close beneath the surface. *Chíl* seed has been sown and several species have been planted, but at the present time all that exists is a few *chíl* saplings along a depression in the ground, the remainder of the area being covered sparsely with brushwood. Nothing can be done here until, after a lapse of years, the soil has increased in depth and fertility.

III.—Nurseries.

51. Two new nurseries were laid out in the Muzaffargarh district during the triennial period, in order to supply plants for the Muzaffargarh-Rohillánwáli road. 2 nurseries were carried away by river action in the Shujabad tahsíl of Multan and were not replaced, as young plants were easily obtainable from villagers. 2 nurseries were planted with vegetables by mistake in Dera Gházi Khan, but this error will be remedied. The nurseries contain a number of young fruit and other trees and shrubs, which are distributed gratis.

52. An area of 1·3 acre was added, and a new nursery was formed at Dera Ismail Khan, and stocked with a large number of fruit trees and trees suitable for roadside planting. No areas are specially set apart for nurseries in Montgomery, but small plots in gardens are kept stocked with cuttings and young plants. There were 3 nurseries existing at the commencement of

1895-96 in the Jhang district, and 3 were added, bringing up the total to 17·3 acres. In Bannu 3 new nurseries were formed and one was made over to the Public Works Department.

53. A very small addition was made in Shahpur, and in Hissár 163·24 acres were transferred to groves. Nurseries of *pípal* trees have been formed in the Ferozepore district. The plants will be put out in encamping-grounds and other suitable places. 63 acres of land were taken up for nurseries in the Pesháwar district, and 2 acres were transferred to groves. Small additions were made to nurseries in Kohát, but the supply of plants was insufficient for planting out on roads, so they were obtained from private gardens at Kohát and the Government garden at Lahore.

54. Three nurseries exist in the Karnál district with an area of 8·53 acres. No alterations took place during the period under report. 2·335 acres were added to the area under nurseries, chiefly in gardens, in the Jhelum district. The plants raised are chiefly fruit and *shísham* trees, of which the former are grown from cuttings.

55. A large addition was made to nurseries in Gujránwála, and 2·83 acres were partly transferred to groves and partly used up. It is proposed that settlers on the Chenáb Canal should be allowed to make use of these nurseries. There were 3·11 acres under nurseries at the commencement of the period in the Gurgáon district, but the Deputy Commissioner reports that they have gradually been abandoned, owing to want of supervision, and that there is now nothing to show in the way of nurseries. It is proposed to re-introduce the system of each tahsíl having its own garden, which is found by experience to be the best system.

56. 5·75 acres along 4 miles of road in Amritsar were sown broadcast with *kíkar* seed, and a large proportion of plants have grown to a height of 2 feet. In the Delhi district there were 4 nurseries at the commencement of the period, of which 2 have been transferred to groves, one given up and one slightly enlarged, whilst 4 new nurseries have been formed. The Delhi Municipality obtains the young plants it requires from private gardens.

57. There are 12 nurseries in Jalandhar which are sufficient for all requirements. 19,019 plants were put out and 20,154 given free to *zamíndárs*. There is only one nursery left in Ludhiána, as all the others have been exhausted. New ones will be formed where planting operations are going on. A nursery is maintained at Cherrapani in the Ráwalpindi district, from which young fruit and other trees are liberally distributed gratis. 3 acres were added to this nursery and partly laid out as an orchard.

58. 2·984 acres were newly planted in Gujrát and 3·8205 were abandoned, as they were used up. Nurseries near roads are maintained and looked after by *zamíndárs*, who receive a small payment for their trouble. There are 9 nurseries in Gurdáspur, of which the largest is at the Gurdáspur encamping-ground. An income is derived from the sale of fruit trees to private persons.

59. In the Ambála district 0·15 acres was planted, ·05 failed and 21·97 acres, which were nurseries merely in name, were given up, the area remaining as nursery at end of period amounts to 2·07 acres. Some of the smaller nurseries on the roads of the Siálkot district, which are fully stocked with trees, were abandoned, thus reducing the total acreage to 6·79. The present ones are nearly exhausted, as much work has been done of late years, but they will be re-stocked.

60. Nurseries were formed in the Hoshiárpur district at convenient spots on roadsides for filling up gaps. 1·25 acre in all was added, bringing up the total under this head to 5·98 acres. 8 acres, situated in the Mahásu Orchards, are under nurseries in the Simla district, whence 2,985 fruit trees were distributed.

61. There are 9 nurseries in the Hazára district. About 500 young trees were distributed free, or at a nominal cost, to *zamíndárs*, and 2,035 were sold at 1 anna each to the Grass Committee of Abbottabad for the military road. A small addition was made to the nursery at Mánsehra. ⅛ acre was added to the nursery at Pálampur in the Kángra district.

IV—Government Gardens.

62. Several reports give no information about the condition of Government gardens. Experiments with the Egyptian date-palm have been successful in several districts, and a good deal of attention has been paid to the cultivation of fruit trees.

63. Two gardens are maintained by the Municipality and 7 by the District Board in Multan; 6 of the latter contain good mango, date-palm and other fruit trees, as well as ornamental trees. 119 mango trees were planted in the Am Khás garden in 1892-93. They are in good condition, and a number of them are about to bear fruit. The fruit gardens at Leiah, Bhakkar and Tánk in the Dera Ismail Khan district are progressing favourably, and much improvement has taken place in the two former.

64. Date-palm seed was obtained in 1891-92 and sown at various places in Jhang. The plants at Shorkot are reported to be in good condition. In the station garden grapes have not done well, grafted mangos are progressing, lemon trees have generally been successful, but oranges have failed. Several fruit trees were planted in this garden and also at Chiníot, but the supply is inadequate to allow of any distribution to villagers at present The stock of young plants in the Bannu Government garden for distribution has fallen very low, but the nurseries are being restocked.

65. There is only one Government garden in Kohát. It contains various kinds of fruit trees and vegetables, and has greatly improved of late. A large number of fruit trees was planted out, and they are apparently doing well. The garden has now become self-supporting. The Arabian date-palm seedlings that were distributed to different persons have mostly proved a failure. Five trees, however, have reached a height of 8 feet and have borne fruit.

66. In Rohtak some date-palm seedlings, obtained by broadcast sowings in the previous period, were sent to the Tahsíldárs for distribution to villagers, but owing to the scanty rainfall they were a complete failure. In Karnál also experiments with this species have not been very successful. However, about 70 plants, grown from seed, are alive and doing well, and have attained a height of 5 to 6 feet. Besides these a few plants, obtained from the offsets received from Egypt in 1891, exist and are in good condition.

67. In Gurgáon to increase the revenue the garden bullocks were let out on hire, but this had to be stopped, as the garden naturally suffered from want of water. The Roshnára garden near Delhi has been much improved by cutting down old trees and opening out roads.

68. There is one ornamental garden in Jalandhar, the Empress or Town Hall garden. It is partly laid out with grass and partly with fruit trees and vegetables. It has greatly improved since October last, as the Deputy Commissioner has given a great deal of attention to the garden; before that time the *máli* in charge had allowed it to go to ruin. There are four other small gardens in the district.

69. In the Ludhiána district, there are 4 fruit gardens, but no ornamental gardens properly so called, though a portion of the rakh is used as a flower garden. Six gardens are maintained in the Ráwalpindi district for the propagation of fruit trees and flowers. Large supplies of young fruit and other trees are distributed annually to *zamíndárs* and other persons.

70. There are about 85 Egyptian date-palm seedlings in the Gujránwála station garden, which have reached a height of 4 to 5 feet. The District Board

maintains 5 gardens, the largest of which is at head-quarters with an area of 20 acres. These gardens are famous for their oranges, which are largely cultivated by the District and Municipal Boards and by private persons. Four gardens, of which two are orchards, are maintained by the Municipality. There are also small gardens at Wazírabad and Rámnagar.

71. The gardens at Gujrát suffered a good deal from storms and drought. A few mango and orange trees were planted during the triennial period. Apple, pear, peach and plum trees were received from Simla, and planted out in different gardens in Gurdáspur, where they are doing well.

There are only 2 Government gardens in Ambála, *viz.*, the Ambála District garden, which is an ornamental or flower garden, and the Morni experimental garden, which was started with the object of trying experiments with the cultivation of tea and fruit trees. The Deputy Commissioner proposes that the latter garden should be transferred to the Forest, or some other, Department, as its maintenance is a heavy drain on the District Board's resources.

72. In Siálkot cuttings of American vine, received from Simla a few years ago, are doing well and have already borne fruit. Experiments with the Egyptian date-palm have been very successful. Several hundred plants have been distributed over the district, most of which are doing well. About 100 were planted in the Cantonment gardens and on the plateau of the fort in 1890, some of which are already bearing fine large fruit. There are still several hundred plants ready for transplantation.

73. Experiments have been tried with five species of *Eucalyptus* in Hoshiárpur. There is a fine avenue of *E. tereticornis* on one of the station roads, and this species has also been grown successfully at Hoshiárpur and Una. Experiments with *E. rostrata* have also succeeded pretty well, but the three other species—*E. goniocalyx*, *globulus* and *citriodora*—have failed. A few trees have now attained a girth of over 6 feet. *Robinia* plants have been raised at different places and are to be transplanted in the *chos*, but experiments with the seed of *Acacia melanoxylon*, obtained from Nainitál, have been unsuccessful. The Deputy Commissioner gives the name of somes grasses and trees that have been found useful for binding the soil on the banks of *nullahs* and embankments.

74. Fruit trees are grown in the Mahásu orchard, a few miles out of Simla. Prior to 1893 they were distributed to Government officials, who owned estates in Simla, and to the adjoining Native States. Since that year the distribution to Native States has continued, but the greater portion of the plants has been made over to the Tahsíldárs for distribution to *zamíndárs*, who have taken a keen interest in fruit culture.

75. There are several fruit gardens in Hazára, especially in the Harípur tahsíl, and a large establishment is kept up for their maintenance. About 800 fruit trees were obtained from the Anandale garden, of which 200 were distributed, and the remainder planted in different gardens. Those planted in the Mánsehra garden suffered a good deal from drought. Fruit trees are distributed free, or at a nominal cost, to villagers, so far as the nurseries can admit of this distribution.

76. A good deal of fruit cultivation is also carried on in the Kángra district. Several plants were received from Simla and a few from Lahore. Some were planted in the different gardens and the others distributed to various persons. It is too soon yet to decide on the success or otherwise of fruit growing in Kángra. However, the Deputy Commissioner reports that apple trees have commenced to bear fruit at Dharmsála and in Kulu, and that the fruit is excellent. Cherries apparently are not a success anywhere, which is remarkable, as the wild cherry is a common tree. The rainfall is too great in the Kángra valley for pears to do well, but they do better in Kulu.

(*c*).—Cattle-trespass and Lopping.

77. There is not very much to note under this head. Thorn fences and mud walls are the ordinary means used for the protection of young plants. Cactus hedges are used in Jalandhar, and this has also been found

the most effective way of preventing damage from cattle in Hoshiárpur, as well as the most economical and durable. Plants are seldom put out less than 4 to 5 feet high, so that the fences are made about 5 feet in height. Mud walls are of little use in this district, as they tumble down during the rains. Where *cactus* is not available, dry thorns or branches are used. In Gujránwála station iron fences are being tried as an experiment.

78. In most districts an establishment is maintained for the protection of the young plants, and cattle found damaging them are sent to the pound. In Jalandhar 18 suits for damages were also instituted.

79. The Deputy Commissioner, Siálkot, reports that great damage is done to *siris*, mulberry, *ber* and *kíkar* trees, young and old, by goat herds, who lop trees even up to 20 feet from the ground. It is proposed to make the *zaildárs* and *lambardárs* responsible for the trees near their villages.

80. Lopping under supervision is carried out in most districts, but several reports give no information on the subject.

(*d*).—Fodder Trees.

81. In most districts no special measures appear to be taken to grow trees suitable for fodder, but *kíkar*, *pípal*, *banyan*, *siris* and other fodder trees are found growing along most district roads. The former species is extensively grown in the arid districts, and during 1895-96 attention has been paid to planting out *pípal* trees and cuttings in the Hoshiárpur district; it is intended to increase the proportion of *pípal* trees on roads to be planted out during the next triennial period. *Kíkar* has not been planted out, as a rule, in this district, as it does not satisfy the conditions of a good avenue tree, but a larger number are to be planted in future.

(*e*).—Financial.

82. The following statement shows the financial results of the period under report as compared with the figures of the three preceding triennial periods:—

1	2	3	4	5
Year.	Income.	Expenditure.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
1884-85 to 1886-87	1,92,874	4,36,519	...	2,43,645
1887-88 to 1889-90	3,64,145	7,05,868	...	3,41,723
1890-91 to 1892-93	5,25,320	8,29,574	...	3,04,254
1893-94	1,86,209	2,74,410	...	88,201
1894-95	1,70,189	2,68,163	...	97,974
1895-96	1,93,467	2,63,318	...	69,851
1893-94 to 1895-96	5,49,865	8,05,891	...	2,56,026

From the above it will be seen that the income from arboriculture is still rising, and that an increase of Rs. 24,545 took place during the period under report. On the other hand, there has been a decrease in expenditure of about the same amount, and the deficit is less by about half a lac compared with the figures of the previous triennial period. The revenue and expenditure have remained fairly constant during each of the three years.

C.—DEVELOPMENT OF ARBORICULTURE BY PRIVATE PERSONS.

83. A good deal of progress has taken place, especially in the moister districts, in tree planting by private persons. In several districts fruit and other useful kinds of trees are distributed free to *zamíndárs*, or a merely nominal price is charged. This has done much towards increasing the general interest in arboriculture.

84. In the arid districts arboriculture is carried on under difficulties, and not much has been done. In Muzaffargarh landowners have planted mango trees on their land where it adjoins the main road. Many fruit and other trees are distributed, and many gardens have been formed on *sailába* land in Dera Gházi Khan, but the people are much discouraged, as many gardens have lately been carried away by floods.

85. As regards the very dry districts progress has been greatest in Pesháwar and Kohát, where much care is bestowed on the cultivation of fruit trees, in places where water is available. The climate and soil of Kohát proper is said to be especially favourable for fruit culture. In this district every endeavour is made to impress on the people the advantages of village fuel and fodder reserves, but the large majority are said to be apathetic to the last degree, and to care nothing so long as their flocks and herds can eke out an existence on the scanty vegetation. In Ferozepore, owing to the scarcity of rain in 1895-96, the villagers have suffered greatly, and have sold off the trees on their lands to a large extent.

86. From Amritsar it is reported that the interest of private persons in arboriculture is increasing. Several fruit gardens have been planted during the last three years, and the *zamíndárs* have taken to planting their *banjar* lands with *kíkar*. There are very few gardens in Jalandhar, as the cultivation of the land is more profitable. However, rich *sáhúkárs* and *zamíndárs* own gardens, especially in the neighbourhood of Jalandhar and Nawashahr. Near the former town there are also 12 private groves of *shisham* trees, varying from ½ to 12 acres in area, and situated on barren sandy soil unsuitable for cultivation.

The Deputy Commissioners of Lahore and Delhi give lists of persons who planted trees.

87. Coming now to the fairly moist, or forest, districts, it is reported that no persons took any interest in arboriculture in Gujrát. In Siálkot, on the contrary, much attention was paid to tree planting. Small fruit gardens and large orchards are being planted all over the district, as a source of profit, and small groves of timber trees are seen near every village well. The cultivation of vegetables from imported seed is increasing, and applications are freely made for superior kinds of grafted or other fruit trees, which are supplied as far as possible at half prices. In Simla also great interest is taken in fruit cultivation. From Hazára it is reported that the people are very fond of planting fruit and other useful kinds of trees on their private lands, and also in burial grounds and round tanks and wells. The same is the case in Kángra proper, where nearly every hamlet has its grove of fruit and timber trees.

D.—CANAL ARBORICULTURE.

88. The following statement shows the progress made in planting up canal avenues during the three years under report as compared with that in the previous triennial period :—

1	2	3	4	5	6
Year.	Length of roads and canals suitable for avenues.	Length of Roads and Canals. Fully stocked with trees at the beginning of the year or period.	Planted during the year or period.	Which failed during the year or period.	Fully stocked with trees and plants at the end of the year or period.
	Miles.	Miles.	Miles.	Miles.	Miles.
1890-91 to 1892-93	4,467·68	2,935·21	901·77	1,232·73	2,604·25
1893-94 ...	4,595·36	2,604·25	257·78	207·08	2,654·95
1894-95 ...	4,958·33	2,654·95	187·22	52·52	2,789·65
1895-96 ...	5,047·22	2,789·65	300·02	93·77	2,995·90
1893-94 to 1895-96.	5,047·22	2,604·25	745·02	353·37	2,995·90

It will be seen from the above that the net addition to canal avenues has amounted to 391·65 miles. After omitting the entries due to correction of previous returns, as well as those due to transfers of areas from other heads, the actual work done during the period extended over a length of 509·98 miles, and the actual failures, excluding 19·85 miles carried away by river action, were 188·94 miles; the length of avenues successfully planted up during the period thus amounts to 321·04 miles, compared with 299·92 miles in the previous period.

89. The progress in plantations may be seen from the statement given below :—

1	2	3	4	5	6
Year.	Area taken up for plantation at the beginning of the year or period.	Area of Plantations. Successfully stocked at the beginning of the year or period.	Sown or planted during the year or period.	Which failed during the year or period.	Stocked at the end of the year or period.
	Acres.	Acres.	Acres.	Acres.	Acres.
1890-91 to 1892-93.	24,852·87	10,942·81	8,459·98	2,918·40	16,484·39
1893-94 ...	24,458·04	16,484·39	577·71	105·72	16,956·38
1894-95 ...	24,706·22	16,956·38	371·12	130·36	17,197·14
1895-96 ...	24,784·11	17,197·14	536·15	339·33	17,393·96
1893-94 to 1895-96.	24,784·11	16,484·39	1,484·98	575·41	17,393·96

This shows an increase of 909·57 acres. After deducting the areas due to correction of errors and transfers from other heads, the net actual increase amounts to 787·50 acres, which occurred chiefly in the Sirhind Canal, Ferozepore Division, and Chenáb Canal, 1st and 2nd Divisions.

90. The progress in nurseries is shown in the following abstract :—

1	2	3	4	5
Year.	Area of nurseries.			
	At the beginning of the year or period.	Added during the year or period.	Given up or transferred to plantations during the year or period.	Remaining at the end of the year or period.
	Acres.	Acres.	Acres.	Acres.
1890-91 to 1892-93	48·21	105·58	87·21	66·58
1893-94	66·58	10·65	19·34	57·89
1894-95	57·89	28·15	20·41	65·63
1895-96	65·63	17·56	17·74	65·45
1893-94 to 1895-96	66·58	56·36	57·49	65·45

The area at the close of the period under report is only 1·13 less than that at the commencement.

91. The financial results of canal arboriculture will be seen from the annexed statement :—

1	2	3	4
Year.	Income.	Expenditure.	Surplus.
	Rs.	Rs.	Rs.
1887-88 to 1889-90	2,60,242	2,17,337	42,905
1890-91 to 1892-93	3,15,367	2,54,508	60,859
1893-94	1,00,106	82,675	17,431
1894-95	76,950	74,701	2,249
1895-96	82,195	80,523	1,672
1893-94 to 1895-96	2,59,251	2,37,899	21,352

It will be seen that there has been a decrease of Rs. 56,116 in revenue, of Rs. 16,609 in expenditure, and of Rs. 39,507 in surplus, compared with the previous triennial period, and that during the last two years the surplus has greatly diminished. The principal decreases of revenue occurred in the Bári Doáb Canal, *viz.*, from Rs. 1,13,291 to Rs. 79,368, and in the Karnál Division, Western Jumna Canal. In the Bári Doáb Canal also the expenditure has decreased from Rs. 47,977 to Rs. 24,542, whilst, on the other hand, in the Chenáb Canal it has increased by Rs. 21,650, owing to the formation of new divisions.

E.—ARBORICULTURE ON PROVINCIAL ROADS.

92. The statement given below shows that the avenues on the Provincial roads were increased by 138·43 miles. Eliminating entries due to the adjustment of errors, &c., the actual work done during the period was the planting up of 201·50 miles, of which 118·94 miles failed, compared with an increase in length of 148·17 miles in the three previous years :—

1	2	3	4	5	6
		Length of roads.			
Year.	Length of roads suitable for avenues.	Fully stocked with trees at the beginning of the year or period.	Planted during the year or period.	Which failed during the year or period.	Fully stocked with trees or plants alive at the end of the year or period.
	Miles.	Miles.	Miles.	Miles.	Miles.
1890-91 to 1892-93.	1,807·62	926·87	362·62	398·89	890·60
1893-94 ..	1,895·44	890·60	157·97	103·30	945·27
1894-95 ...	1,930·79	945·27	81·24	40·14	986·37
1895-96 ...	1,893·36	986·37	91·60	48·94	1,029·03
1893-94 to 1895-96.	1,893·36	890·60	330·81	192·38	1,029·03

93. From the statement of groves, printed at the end of the report, it will appear that there has been an increase of 2·46 acres only.

94. The plantation in the Dera Ismail Khan Division, mentioned in paragraph 85 of the last report, has undergone a slight decrease of 1·24 acres.

95. Nurseries show a total decrease of 7·89 acres, whereas there was an increase of 5·54 in the previous triennial period

96. The following statement shows the financial results of arboriculture in the Provincial divisions during the three years under report and the figures of the previous triennial period :—

1	2	3	4	5
Year.	Revenue.	Expenditure.	Surplus.	Deficit.
	Rs.	Rs.		Rs.
Total 1890-91 to 1892-93 ...	81,137	1,38,399	...	57,262
1893-94	35,895	40,487	...	4,592
1894-95	27,022	36,960	...	9,938
1895-96	38,886	37,662	1,224	...
Total 1893-94 to 1895-96 ...	1,01,803	1,15,109	...	13,306

I have the honour to be,

Sir,

Your most obedient servant,

C. F. ELLIOTT,

Offg. Conservator of Forests, Punjab.

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DISTRICT ARBORICULTURE.

MUZAFFARGARH DISTRICT.

Rainfall.—The rainfall during the last three years compared with that of the three preceding years is small, but this is due to the excessive rains of 1892-93. This is an arid district, but damage was done to the trees in the Taleri gardens and on the Rohilánwáli roads in the Muzaffargarh tahsíl by floods in the Chenáb in 1893-94 and 1894-95.

Nurseries.—In order to supply trees for the Muzaffargarh and Rohilánwáli roads, two nurseries were laid out during the last three years. Many of the trees in the Pakka Nayach nursery have been transplanted on the roads, and very few are left now. Others will be planted.

Groves.—The area planted during the last three years was 4·519, while that of failures amounted to 1·228 acres. Fruit-trees were planted in the Muzaffargarh tahsíl compound and the Alípur Munsif's Court compound, covering an area of 4·519 acres. The only species that failed was *shísham*.

Avenues.—The total length of avenues on roads fully planted with trees alive at the end of 1895-96 was 119·997 miles, compared with 107·267 miles at the end of 1892-93; thus showing an increase of 12·73 miles during the last three years.

The progress during the last three years was about double that of the three previous years, and is apparently due to the interest taken in arboriculture by the Local Boards of Alípur and Sanáwán, where the progress is greatest.

Income.—The total income from arboriculture during the last three years was Rs. 7,907, compared with Rs. 2,907 in the three preceding years. The increase of Rs. 5,000 was chiefly due to the larger sales of roadside trees, which fell in great numbers during the floods of 1892-93, 1893-94 and 1894-95.

Expenditure.—The total expenditure on arboriculture during the last three years was Rs. 21,222, compared with Rs. 24,951 in the three preceding years. The decrease of Rs. 3,729 was due to the reduction of establishment on gardens and in the number of bullocks for working the garden wells, &c.

Cultivation of fruit-trees.—As remarked above, fruit-trees were cultivated in the compounds of the Muzaffargarh tahsíl and the Alípur Munsif's Court during the last three years. Some private landowners also have planted mango trees on their lands, adjoining the road leading from Muzaffargarh to Khangarh. No fruit-trees were distributed among villagers.

Miscellaneous.—A working plan will be prepared during the current year.

I did not take over charge of the district till after the end of the period which is now reported on, so I am unable to add any remarks based on personal knowledge of the facts reported on.

MULTAN DISTRICT.

Rainfall.—The comparative table below shows that the average rainfall during the three years under report was below that of the previous years:—

Tahsíl.	Average for three years ending 1892-93.	Average for three years ending 1895-96.
Mailsi	7·47	5·94
Lodhrán	7·03	4·35
Shujabad	7·22	5·99
Multan	9·84	10·03
Kabírwála	9·14	7·15

Nurseries.—A slight difference in the area of nurseries is owing to two nurseries in Tahsíl Shujabad having been carried away by river action during 1893-94 and not replaced by new ones, as young trees for transplantation to roads could easily be obtained from the *zamíndárs* of that tahsíl.

Groves.—A grove at Makhdúm Rashíd, which was omitted in the last triennial report, though its area was included in the figure of 21·38 acres, should be added to the number of groves reported during 1893-94.

Avenues.—At the close of the year 1892-93 there were 213·44 miles of roads stocked with trees. During the three years under review 57·85 miles of various roads were planted, of which 48·54 miles failed, as per detail below :—

	Miles.
Struck off in 1893-94 by corrections in the returns	21
Perished out of new operations for want of water	14
Ditto old work	13·54
Total	48·54

and 222·75 miles remained fully stocked with trees at the end of March 1896.

The new work done during the three years under report consisted of 41 miles in length on two lines, or 20½ miles on each side, of the road ; 16·85 miles in length of roads represent the filling up of gaps. Instructions have been given that, in future, trees planted by the roadside shall be exclusively *kíkar* or *farásh*, as experience seems to show that in the extremely arid climate of Multan other varieties are not successful.

Financial results.—The income from arboriculture amounted to Rs. 9,678, or Rs. 1,380 more than in the previous triennial period. The increase was due to a larger produce of vegetable crops in district and municipal gardens during the three years under report than in the previous years.

The expenditure for the three years under report amounted to Rs. 38,430, against Rs. 35,414 in the previous triennial period, or Rs. 3,016 more. The increase was due to an increase in the number and salaries of *málís*, &c., entertained by the Municipal Committee, and the dearness of fodder for bullocks employed in the gardens.

Plan of operations.—A plan of operations for the next three years will be laid before the next meeting of the District Board.

Ornamental gardens.—The following gardens were maintained by the Local Bodies :—

Multan Municipal Committee.

Langeh Khan garden.

Am Khás do.

These are pleasure gardens frequented by the city people and visitors to Multan.

District Board.

I.—Shísh Mahal garden, where the Divisional Judge holds his court.

II.—District Katcherry gardens.

III.—Lodhrán Tahsíl do.

IV.—Mailsi do. do.

V.—Kabírwála do. do.

VI.—Serai Sidhu do. do.

With the exception of the District Katcherry gardens, where the trees are ornamental and no fruit-trees exist, all other gardens contain good mango, date-palm and other fruit-trees, as well as ornamental trees, which are the chief source of income credited to district and municipal funds.

In 1892-93 119 mango trees were planted in Am Khás at the place where the annual horse fair is held at Multan. They are now in good condition, and a number of them are about to bear fruit.

DERA GHAZI KHAN DISTRICT.

Rainfall.—As heretofore observed, the average rainfall is singularly variable in this district. For the past three years it has amounted to about 6·87, and this in itself retards the satisfactory development of arboriculture. The country, generally speaking, is an arid tract, with a particularly dry atmosphere and extremes of heat and cold in their respective seasons.

Nurseries.—It is regretted that the number of nurseries was reduced by two during 1895-96, the land having been planted with vegetables by mistake. This error will, however, be remedied, as these nurseries furnish the principal supply of fruit-trees and will have to be maintained in future.

The number and description of young trees distributed gratis to the public during the three years under report is given below. Landowners, who were foremost in applying for young trees, with the object of extending their old, and of establishing new, gardens along *sailáb* lands to the west of the river in the vicinity of the town, have suffered severely by erosions of the river, extensive gardens and groves of fruit-trees having been virtually carried away. They are quite disheartened, and will, it is feared, not be so eager as heretofore in applying for trees for the formation of others :—

	1893-94.	1894-95.	1895-96.
Citrus Limetta	100	80	85
Prunus persica	800	400	300
Mangifera indica	900	1,100	800
Melia indica	1,000	1,200	700
Albizzia Lebbek	500	700	300
Cassia Fistula	175	200	90
Ficus Carica	500	800	900
Bugainvillia	300	600	300
Pomelo—Shaddock	100	80	50
Grapes	1,500	1,200	1,400
Oranges—Citrus Aurantium	500	600	300
Phœnix dactylifera (imported)	2,000	1,800	...
Morus alba	500	700	300
Punica Granatum	3,000	2,000	1,500
Eugenia Jambolana	1,300	2,000	1,000
Bauhinia variegata	500	300	200
Cedrela Toona	300	400	100
Moringa pterygosperma (perennial-bearing, Deccan) ...	500	300	200

and a large variety of roses and other plants propagated by slips, cuttings and grafts.

Plantations.—The area under this head remains the same, *viz.*, 1,677 acres, of which 60 acres continue under afforestation. The Khánwah plantation is being extended, and next year a fuller idea of its afforestation will be given in the report.

Groves.—The grove in the Sharif Sháh Horse Fair ground continues to gain the admiration of visitors from all parts of the country, and as the trees planted there are mostly *Dalbergia Sissoo*, there is little doubt that in time it will increase in picturesqueness, and be of great value for its timber.

Avenues.—As reported before, 114 miles of roads are suited for avenue planting, of which 28·5 miles were under trees during 1894-95. However, 6·50 were added during 1895-96, making the entire length 35 miles. This improvement is due entirely to the extension of roadside nursery planting. As it has been found by experience that *Melia indica* is of rapid growth, handsome, and of dense foliage, orders have been issued for the sowing of seeds of this species, as well of *sissu*, for avenue planting in preference to others. The latter, however, though a slow grower, commands the highest price, owing to its superior timber. *Albizzia Lebbek* is a fast grower and gives good shade, and is also eagerly sought after by *zamíndárs*, as productive of excellent fodder for their cattle, yet it is so short-lived that it is found of little use for avenue planting.

Income.—The average income for the past three years has amounted to Rs. 856, the largest sum being realised in 1893-94. As mentioned in last report, the income is variable, but now that a tract of garden land, which was under cultivation, principally for feed of garden cattle, has been leased out, the income will presumably increase. It is also expected that the produce of the gardens and sale of roadside tree loppings, &c., will improve in value.

Expenditure.—The average for the past three years has been Rs. 6,659 a year, showing a decrease of Rs. 406. This in itself is satisfactory, considering that avenue planting has been extended and afforestation is progessing as well.

By certain other reductions in the garden expenditure, the item under this head will be very considerably reduced in the future.

DERA ISMAIL KHAN DISTRICT.

Rainfall.—The rainfall during the three years under report was as follows :—

1893-94	...	...	...	...	...	...	...	9·02
1894-95	...	...	...	...	...	...	...	13·01
1895-96	...	...	...	...	...	...	...	9·82
					Average	...	...	10·62

compared with 11·09 in the preceding triennial period.

The rainfall during the three years under report has been more constant than in the three preceding years, when it fell from 12·49 in 1890-91 to 4·82 in 1891-92, and rose again to 15·97 in 1892-93.

Wells have remained at a reasonable level, but tanks and lowlying lands were dry for the greater part of the period to which the report relates. Floods from the river Indus, which usually bring a vast tract in Bhakkar and Leiah tahsíls under water during the hot weather, were very low in 1893 and 1895. At some places the river did not even overflow its banks. The upper portion of the Kuláchi tahsíl also suffered for want of a sufficient supply of water from the hill torrents.

Nurseries.—At the close of the year 1892-93 there was a total of 10·4812 acres of nurseries, to which ·25 acres were added in 1893-94, ·75 in 1894-95, and ·30 in 1895-96, making a total of 11·7812 acres at the close of the last mentioned year. A new nursery has been formed at Dera Ismail Khan, containing a large number of fruit-trees, and also trees suited for roadside planting. It is protected by a barbed wire fence, and is situated near the circular road where supervision can be easily exercised.

Plantations.—There are no plantations in this district, nor is the soil of the tract, where perennial water is available, suitable for plantations, as it is too stony and hard for the purpose.

Groves.—There was a total of 17·50 acres of groves at the close of the year 1892-93, from which if 4·90 acres on account of failures in the Bhakkar, Leiah and Kuláchi tahsíls be taken, there remains a balance of 12·60 acres at the close of the triennial period. The failure is attributed to deficient floods in the River Indus, and want of a sufficient supply of water from the hill torrents.

Avenues.—There were 44 miles under avenues at the close of the year 1892-93, and the returns show that about six miles of avenues were planted during the following three years, thus :—

	Miles.
Alive at the end of the year 1892-93	44
„ „ „ 1893-94	47
„ „ „ 1894-95	49·50
„ „ „ 1895-96	49·75

There is a total length of about 100 miles suitable for avenues in this district, so when nearly 50 miles have been planted with trees, the result may be regarded as fairly satisfactory, especially in such a dry district as Dera Ismail Khan.

Trees, Municipal.—The double row of trees on the circular road at Dera Ismail Khan and Karor continues in a satisfactory condition, and the trees on the circular roads at Bhakkar and Leiah, which were a short time back not in such a flourishing state as the trees at the former two places, have now much improved, and form double rows. These trees continue to be maintained by the Municipal Board.

Supervision.—As before, the work of supervision was carried on by Tahsíldárs and Náib-Tahsíldárs under the Deputy Commissioner's direct control. Lála Kanhya Lál, Tahsíldár of Leiah, took much interest in the work, and for this reason his transfer from the district is a loss to arboricultural operations in the future. A portion of his work in this connection was the making of a very useful garden, well stocked with fruit-trees, near the tahsíl building. The practice also obtains here of sending out the head municipal gardener to inspect the work of arboriculture in the outlying tahsíls, and he is remunerated for this with an allowance of Rs. 5 per mensem from District Funds.

The method of planting trees and seedlings.—This was fully described in the triennial report for the period ending 1892-93, and no change in this respect has been made in recent years. *Kíkar, sirae, farásh* and *shísham* continue to be the favourite trees for planting on avenues. Mr. Gee, late Deputy Commissioner, while on tour in the interior of the district in 1894, noticed that many of the subordinates entrusted with tree-planting did not understand their work properly. He accordingly issued detailed instructions on the subject, which are, I believe, followed carefully in all tahsíls.

Income and Expenditure.

Year.	Income.	Expenditure.	Deficit.
	Rs.	Rs.	Rs.
1893-94	295	4,915	4,620
1894-95	459	4,994	4,535
1895-96	272	4,685	4,413
Average	342	4,864	4,522
Average for three years ending 1892-93... ...	119	3,929	3,810

It will be observed that the average of the income, as well as that of the expenditure, for the three years under report, is far higher than that of the income and expenditure of the three preceding years. The expenditure of the District Board on arboriculture is no doubt very large, and during the three years under report it has gone on increasing at the rate of Rs. 935 per annum. The increase in the expenditure is, however, not incommensurate with the results shown, and it must also be remembered that the district, being almost wholly dependent upon rain for its irrigation, is not favorable to tree planting.

Fruit-trees.—The several fruit gardens at Leiah, Bhakkar and Tánk continue progressing favorably, and much improvement has taken place during the period under report in the condition of the gardens at Leiah and Bhakkar.

The trees and groves on the roads leading from Dera Ismail Khan to Bannu and Tánk are under the supervision of the Public Works Department. A grant of Rs. 35 per mensem is made for the maintenance of the roads from District Funds, Rs. 20 for the road leading to Tánk and Rs. 15 for that which leads to Bannu.

The difficulties of carrying on arboricultural operations in the *thal* were fully explained by Mr. King in his last triennial report, and until the projected canal becomes an accomplished fact, there seems little chance of tree planting being over carried to a successful issue in the tract in question.

MONTGOMERY DISTRICT.

Rainfall.—The following table shows the rainfall of the three years under report as compared with the average :—

Year.	Actual yearly rainfall.
1893-94	9·04
1894-95	7·84
1895-96	13·36
Average	10·28
Average of previous years	10·76

The average of the three years closely equals the normal average.

Nurseries.—No areas were specially set apart for nurseries, but small plots in gardens were kept stocked with cuttings and young plants, for the purpose of replacing dead trees on roads, &c.

Groves.—The total area of groves, existing in this district at the end of the triennial period under report, was 746 acres, as in the last report.

No fresh areas were planted, or transferred from nurseries, during the three years under report.

The existing groves consist of mature trees which require no particular care. The trees planted are generally *kikar, ber, shisham* and *sharin*.

Avenues.—Avenues to the extent of one mile on the Okára and Dipálpur road in Tahsíl Dipálpur were planted during 1895-96. The work done during the three years under report chiefly consisted of replacing dead trees with fresh ones, or protecting young trees from frost during the cold weather, or from heat in summer. The greater portion of the roads in this district remain unplanted, owing to bad soil and scarcity of water. White ants are very destructive here and do a great deal of damage to young plants.

Income.—The income derived from arboriculture during the years under report was as follows:—

	Rs.
In 1893-94	782
„ 1894-95	1,017
„ 1895-96	1,605
Total	3,404

In the previous triennial period ending 1892-93 the income from arboriculture was Rs. 3,530. The income for the period ending 1895-96 includes a sum of Rs. 835 on account of sale-proceeds of the pumping-engine. Excluding the item of Rs. 835, there was a falling off of Rs. 961 during the years under report, which is chiefly due to the very small quantity of produce available in the station gardens, owing to the scarcity of water and deficient rainfall.

Expenditure.—The expenditure incurred on arboriculture during the three years under report was as follows:—

Year.	Gardens.	Groves and avenues.	Total.
	Rs.	Rs.	Rs.
1893-94	2,178	653	2,831
1894-95	2,354	922	3,276
1895-96	4,987	862	5,849
Total	9,519	2,437	11,956

In 1895-96 Rs. 200 only were expended on the extension of avenues, the remaining expenditure of 1895-96, as well as the expenditure incurred during 1893-94 and 1894-95, represent the cost of maintenance and repairs of existing gardens, groves and avenues.

A very large increase of expenditure is noticeable under gardens in the year 1895-96, in comparison with 1894-95 and 1893-94 and the triennial period ending 1892-93, and is due to—

(1) the annual contribution of Rs. 504, paid formerly from Provincial Funds, having been withdrawn with effect from 1st April 1895 (*vide* Punjab Government letter No. 899, dated 22nd May 1894);

(2) the annual contribution of Rs. 252, paid from Municipal Funds, being credited to District Fund, instead of being spent directly on the garden, as was the practice heretofore;

(8) the initial cost of purchasing bullocks to work the wells in place of the engine, which was out of order and would not work properly.

Supervision of work.—The working was generally supervised by the Deputy Commissioner, District Forest Officer and the Tahsíldárs.

JHANG DISTRICT.

Rainfall.—The following table shows the rainfall for each of the past three years :—

Year.	*Actual.*	*Average.*
1893-94	10·65	
1894-95	7·04	8·61
1895-96	14·33	

The fall is insignificant.

Nurseries.—There were three nurseries at the close of the previous triennial period with an area of ·34 acres. To these were added three other nurseries, formed at Dichkot, Khuriánwála and Lyallpur, comprising an area of 6, 5 and 6 acres, respectively, in 1895-96. An area of ·04 was transferred in the same year to groves, thus leaving 17·30 acres under nurseries at the end of the period under report. Nine hundred trees were removed to Kot Isa Shah road in 1895-96, and they are doing well. The principal species grown in the nurseries are *sharín, kíkar* and *shísham*. In 1891-92 some date-palm seeds were supplied by the Director of Land Records, and were sown at different places in the district. The plants at Shorkot are reported to be in good condition. The nurseries at head-quarters are looked after by the garden establishment.

Plantations.—The only noticeable plantation in the district is that at Sáhíwál, situated on the left bank of the River Jhelum. There are only a few *shísham* trees to be seen now in the Bela Baggar plantation, which was swept away by the river some years ago. The plantation at Sáhíwál being on very fertile soil furnishes a good supply of timber. In October next a large number of fallen trees will be sold by auction. Grass and *munj* also grow well and are a source of income. The plantation is supervised by a chaukídár, who receives Rs. 7 per mensem from the District Funds.

Groves.—There was no alteration in the area under groves during the triennial period under report.

Fruit-trees.—In the station garden at Jhang grapes have not done well, so far. Grafted mango trees are progressing. No mango trees were destroyed by frost during the past three years, and it is hoped that several of these trees will bear fruit next year. Lemon trees have generally done well, but oranges have failed.

The following fruit-trees were planted in the station garden in 1895-96:—

Grafted mango trees	40
Malta orange trees	45
Orange trees	40
Sweet lime trees	20
Kághzi lemon trees	40
Pomegranate trees	30
American vine trees	30
Arabian date trees	12
Gulkand rose plants	300

while in Chiniot some 250 fruit-trees, mangoes and limes were planted.

The groves under the charge of Municipal Committees are in a flourishing condition.

Avenues.—1·65 mile of Kot Isa Shah road was planted with 900 trees, out of which ·65 failed. The soil of the district, and especially that which is at a distance from the river, is not suited for avenues.

In Jhang station some 1,200 young trees are being tended, of which a large number were put out last year to fill up the extensive gaps which existed.

Income.—The income under different minor heads during the last three years was as follows:—

Year.	Fund.	Ornamental gardens, including crops.	Nurseries.	Plantations.	Groves and avenues.	Miscellaneous.	Total.
1893-94	District Fund ...	677	...	292	118	...	1,087
	Municipal Fund ...	181	...	...	240	24	445
1894-95	District Fund ...	405	15	378	52	104	954
	Municipal Fund ...	201	...	...	162	...	363
1895-96	District Fund ...	705	...	1,061	127	...	1,893
	Municipal Fund ...	203	...	...	291	...	494

The higher income during the year 1895-96, *i.e.*, Rs. 705, is chiefly due to the sale of green wheat from the station garden.

EXPENDITURE.

Year.	*By Municipal Committee.*	*By District Board.*
1893-94	1,913	4,447
1894-95	1,518	4,097
1895-96	1,591	5,023

The increase in the expenditure incurred in 1895-96 is chiefly due to the establishment of new nurseries at Dichkot, Khuriánwála and Lyallpur.

General.—Generally speaking the district is an unfavorable one for arboriculture, though a considerable improvement may be expected after the extension of the Chenáb Canal.

The soil of the district garden is permeated with saltpetre, and the supply of fruit-trees is at present inadequate to enable any distribution to be made to *zamíndárs*. Some 500 fruit-trees (grafts) were put down during the past year, and it is expected that another 500 will be planted during the current year. The irrigation of roadside trees is attended with difficulty. Where there are wells in the vicinity of the roads, the villagers generally want all the water they have for cultivation. Planting is, however, possible in the stretch of land between the Jhelum and Chenáb, known as Vichand. Nine hundred trees were put out here last year, and it is expected that another 3,000 will be planted this year; the arrangement being the payment of nine pies per tree per month to the well owner supplying the water. The road from Chíniot to Shorkot runs for the greater part through barren waste, and little can be done; but I am endeavouring to get canal water for the first few miles from Chíniot, which, if received, will render roadside avenues possible.

BANNU DISTRICT.

Rainfall.—The rainfall of the first two years under report was decidedly good. In 1895-96 it was deficient in quantity and unseasonable; the summer rains stopped early in the season, and there was no winter rain worth speaking of till the very end of January.

Nurseries.—The nursery opened during 1892-93 at Gandi Khan Khel has been made over to the Public Works Department, together with the charge of the avenue on the Bannu-Dera Ismail Khan road.

Three fresh nurseries have been established at selected useful centres. Their areas are given below:—

	Acres.
1. Mánjiwála	0·12
2. Silwan	7·34
3. Isa Khel	0·03

The total area under nurseries at the close of the present triennial period was 7·64 acres, as compared with ·48 acres at the close of the preceding period.

Plantations.—The area under *shísham* forest was 1,192·66 at the end of the year 1895-96. Practically, the whole of this area has always hitherto been shown as stocked with trees, but I believe that this is a mistake, and that not more than about 500 acres are actually stocked with trees. Enquiries will be made and the correct figures given in next year's statements.

Groves.—The increase of 7·23 acres in the land under groves, over the area shown at the commencement of the three years under report, is due to corrections made as the result of special inquiries instituted in the year 1893-94.

Avenues.—It is difficult to say how much progress has been made in the three years under report, as in both the last two annual statements there are remarks to the effect that alterations have been made in the figures, in order to correct mistakes in previous years' returns. Up to 1893 much attention was given to the avenues on the important high road from Kohát to Dera Ismail Khan. These avenues have now been transferred to the Public Works Department, and the attention of district officials is being given to the extension of avenues on district roads. The following figures show the operations undertaken during the past three years :—

Year.	Planted.	Died.	Survived.
	Plants.	Plants.	Plants.
1893-94	1,550	130	1,420
1894-95	3,338	2,340	998
1895-96	3,948	460	3,488

There is an Arboricultural Sub-Committee of the Local Board in each tahsíl, but the active member is the Tahsíldár.

In the cold weather of 1895-96 I found that the stock of young trees in the Government garden for distribution had fallen very low, and since then the stock has been still further diminished by giving away 200 young *jáman* trees to be planted out in the cavalry lines. The nurseries are being re-stocked and are doing well.

Income.—The steady increase in the income from ornamental gardens is satisfactory, and will, I hope, be maintained. The income from plantations is derived from that part of the *shísham* plantation which is not stocked with trees, and which is leased out to cultivators.

Under the head of "Miscellaneous" is shown the income derived from grazing leases of the district *rakhs*. I do not think that this can be right, and I propose to omit this income from future returns.

Expenditure.—The decrease in expenditure was due to a slight reduction in establishment at the time of the transfer of the avenues on the Public Works road to the Public Works Department.

SHAHPUR DISTRICT.

Rainfall.—The rainfall of the year was less than that of the previous years, and comparatively little could be done to extend the area under trees.

Nurseries.—A very small addition has been made under nurseries.

Plantations.—There are no plantations in the district.

Groves.—The area under groves has been largely increased in 1895-96. The increase has taken place on the roads from Jháwárián to Shahpur and from Shahpur to Sahíwál, where canal irrigation has become available, since the new canal has been extended.

Shisham and *kíkar* trees have been planted in *chak patri* land on both sides of the Sáhíwál roads.

Avenues.—The area under avenues has increased from 486 to 526 miles during the three years under report, which is due to the main roads being gradually lined with trees. *Kíkar* and other common trees have been planted there.

Income.—There has been a great decrease in the income during the last two years. There were fewer sales of fuel and timber, and no thinnings were made during the years under report.

Expenditure.—Owing to the decrease in income during the years under report, the expenditure was somewhat reduced.

HISSAR DISTRICT.

Rainfall.—In 1893-94 the rainfall was very heavy, and the season, therefore, very favorable for arboriculture, but in 1895-96 it has been very scanty. The poor rainfall of 1894-95, and also the scantiness of rain during the following year, made the season generally very unfavorable for arboriculture.

Addition of area.—The subjoined statement shows the area planted with trees during the years under report:—

Description of works.	1893-94.	1894-95.	1895-96.	Total.
Nurseries	...	...	...	...
Plantations	31·25	41·26	...	72·51
Groves	...	192·70	5·56	198·26
Avenues	...	...	...	...

72·51 acres under "plantations" have been newly planted in the Hánsi Government Bir. The details of the addition of 198·26 acres under groves is as follows:—

	Acres.
Phool garden, Hissár, transferred from Hissár Municipality to Hissár District Board	7·42
Transferred from nurseries to groves	163·24
Ditto plantations to groves	22·04
Ditto Municipal Fund to Provincial Fund	5·56
Total	198·26

Reduction of area.—The subjoined memo. shows the area given up, transferred, or which failed during the triennial period:—

Description of works.	1893-94.	1894-95.	1895-96.	Total.
Nurseries	...	163·24	...	163·24
Plantations	...	27·94	...	27·94
Groves	...	33·70	5·56	39·26
Avenues	...	...	...	...

The area of 163·24 acres under nurseries was transferred to groves under the Provincial Fund during 1894-95.

Out of an area of 27·94 acres under plantations, 22·04 acres were transferred to groves and 5·90 acres failed, owing to drought.

The details of the reduction of area under groves is as follows:—

	Acres.
Transferred to the District Board, Hissár, from the Municipal Committee of Hissár, as stated under head "Addition of area"	7·42
Church garden at Sirsa transferred from Sirsa Municipal Committee to Public Works Department	4·84
Failures	23·04
Transferred from the Municipal Fund to the Provincial Fund ...	5·56
Total	40·86

Nurseries.—No new nurseries were formed, and no existing ones abandoned during the period under review. The seven existing nurseries have been duly maintained. They are all in fair condition, the irrigation being effected from wells and canals.

Plantations.—There are two plantations at Hánsi Bir and Bhiwáni tahsíl building. It may also be worthy of note that the Hánsi Bir plantation produces a timber crop, and is irrigated by a flow of canal water. 72·51 acres were newly planted in the Hánsi Bir.

Groves.—There are altogether 17 groves in this district. No new garden or grove increased in area during the year under report. Most of the trees in the Hánsi District Board garden still need further care and attention.

Avenues.—The total length of roads planted with trees at the beginning of the year 1893-94 was 108·26 miles, and no increase or decrease has occurred during the triennial period under report. There are 29 roads on which avenues, consisting of single lines of trees, exist.

Income.—The detail of income realised during the three years under report has been given in Statement No. VI. The increase of Rs. 1,030 in the year 1894-95, as compared with the preceding year, is mainly due to Rs. 1,484 on account of sale of trees from the Káli Devi nursery at Hánsi.

The income has been steadily increasing during the three years under report, and arboricultural operations now realise a handsome profit.

Expenditure.—An excess expenditure of Rs. 4,011 during 1893-94, as compared with the following year, was partly due to the following expenditure from District Funds:—

	Rs.
Digging the land of Parker garden at Hissár	308
Purchase of three pairs of bullocks for Parker garden at Hissár ...	450
Construction of Káli Devi water-course for irrigating the Hánsi District Board garden	415
Construction of a *dohka* for roadside trees	123
Total ...	1,296

Owing to the Church garden at Sirsa being transferred from the Sirsa Municipality to the Public Works Department, and to a few bullocks of the District Board being sold in 1894-95, the expenditure during that year decreased. The difference between the expenditure of 1894-95 and 1895-96 is small and calls for no remarks.

FEROZEPORE DISTRICT.

The accompanying seven returns show the result of the operations of the past three years, of which the year 1895-96 deserves special notice. In this district *kikar* trees have almost everywhere been planted with success. In the Punjab the *kikar* is the most useful tree for cultivation from all points of view, and is very popular. *Shisham*, of course, is the best, but it takes a very long time before it becomes mature enough for use; hence the saying in the Punjab, "*Dáda lávé tán pota káte.*" (If the grandfather plants it, the grandson should cut it). On the other hand, *kikar* only requires a few years to become mature enough for several useful agricultural purposes. Therefore in this district *kikar* trees have been mostly planted, and *shisham* to a smaller extent. During 1895-96 the villagers suffered greatly from want of rain, and began selling off the trees on the banks of the inundation canals and elsewhere; consequently timber and fuel have become cheaper.

Hitherto the District Board have been selling their mature and fallen trees on the spot through the agency of the Local Boards, but it was not easy to supervise these sales everywhere in the district, and the result was not so favorable as it might have been. Seeing, therefore, that fuel and timber sold locally did not bring reasonably good profit to the District Board, a depôt was opened at Ferozepore under the guidance of Mr. E. B. Francis, the Deputy Commissioner, towards the end of the last year.

The depôt is situated on a tract of land on the Mall road, near the railway station, half way between the city and cantonments. Experiments with different foreign seeds, fodders, machinery for lifting water and threshing corn, &c., &c., are also carried on here. Mature and fallen trees are brought in from all parts of the district, whence the cost of carriage is not prohibitive. Elsewhere they have to be sold locally, but every effort is made to bring the timber and fuel to head-quarters. The results are already hopeful. During the year 12,000 cwt. of firewood have been supplied under contract to the Government Ordnance Department at 7 annas per cwt. and 200 cubic feet of *shisham* for Rs. 400. It was ascertained that timber of certain dimensions was in demand for roofing purposes. Hence, after felling mature trees, they are converted into *karries* and small beams, and carried to the depôt, where they find ready sale.

The District Board have been paying Re. 1 per cubic foot for rather inferior timber for roofing village schools and other buildings. Now, instead of buying this inferior wood, that did not last long, good beams have been supplied locally at 9 annas per cubic foot, which have proved much cheaper and more durable.

The income has increased to Rs. 11,647 against Rs. 4,224, the average of the last two years. Of course the expenditure has increased also; but it is found that as experience is gained, the expenditure is steadily reduced, and the income improves every month. For instance, to begin with, carts were hired to bring in wood, but after some time the District Board considered that it would be advantageous to make its own carts out of its own wood and keep its own bullocks. The idea was carried out with good results. When not required to cart wood, the bullocks work on the well and land, where fodder for the bullocks is grown, and small nurseries are being taken care of. This is the tract of land already alluded to, about 9 acres, quite near the Mall road.

The District Board was wise enough to take this tract of land from Government on a 20 years' lease at Rs. 2 per *ghumáo*. Of this land a little more than two acres is used as a timber and fuel depôt, and the remainder is used for agricultural and arboricultural experiments.

The expenditure under the head "Arboriculture" for the year 1895-96 has reached the unusually high figure of Rs. 12,443, as per detail below, while the average expenditure of the past two years amounts to Rs. 7,437. But the District Boards are the gainers on the whole :—

Detail of expenditure for the year 1895-96.*

	Rs.
Improvements to Home's *band*, where fruit-trees have been planted	400
Construction of a masonry well, office, godown and expenditure on bullocks and servants' houses at the depôt...	1,200
Four carts and eight bullocks	500
Improvements to the garden at Moga, which tahsíl pays the highest local rate	400
Cost of establishment	1,100
Maintenance of, and improvements to, the existing groves and avenues, together with cost of cutting and sawing wood, both at the depôt and on the spot	8,843
Total ...	12,443

Considering, therefore, that the District Board have sunk a well and constructed buildings at the depôt, the ordinary expenditure is not much higher than the average of the past few years, while the gain during the first year comes up to Rs. 7,423.

It may be argued that the District Board have used up a great deal of wood, but whatever wood has been sold has realised a much higher price at the depôt than what used to be received from local sales, *viz.*, a few annas per tree.

When mature trees are felled, *farásh* and *sirás* are cut first, as these become useless, if left long after maturity; also such thick trees are removed as interfere with the growth of others. A *kíkar* is considered to be full grown after 16 years and *shísham* after 40 years.

Whenever a tree or trees are removed, arrangements are made during the ensuing rainy season to plant new ones, and in such places the gaps are generally filled with *kíkar*.

It has been found that the best and cheapest way of growing *kíkar* is to dig long, narrow ditches, and sow the seed on the soft soil. The plants are then left alone until they are big enough to require thinning.

No *bhistís* are employed. The ditches above alluded to are filled with water from the inundation canals, and where the canal water cannot reach them, they have to depend on rain.

Under instructions received from the Commissioner of the Division, nurseries of *pípal* trees have been planted, which will be transplanted in encamping-grounds and other suitable places during the rainy season.

The Government plantation at Kehruwála is in a flourishing condition, for which, however, a separate report will be submitted.

The Mamdot plantation, alluded to in last year's report, has done exceedingly well, as it can be irrigated by a branch of one of the inundation canals.

In conclusion, I have only to repeat the high opinion that I have always held of the honesty and intelligence of the *darogha* in charge of all these operations. Mr. Francis, the late Deputy Commissioner, placed full reliance on this man, and he fully deserves it.

PESHAWAR DISTRICT.

Rainfall.—The statement shows the average rainfall of the past two years and the year under report. The figures are obtained from the register of rainfall, prescribed by the Financial Commissioner, Punjab.

Nurseries.—About 63 acres of land were taken up for nurseries in the Pesháwar, Mardán, Chársadda and Swábi tahsíls, and 2 acres were transferred to groves.

Plantations.—As ample supplies of timber are floated down the Swát, Kábul, Bára and Indus rivers, no plantations for producing timber are necessary in this district.

Groves.—As stated above, 2 acres of land under nurseries were transferred to groves in the Pesháwar, Mardán, Chársadda, and Swábi tahsíls.

Avenues.—169 miles of road were planted with young trees during the three years under review, of which 81 miles failed, and 88 miles remained fully stocked with trees at the end of March last.

The failures were due to the depredations of white ants in some parts, and an insufficient supply of water in others.

Income.—The income from district arboriculture during the three years under report was Rs. 3,933, or Rs. 1,446 in excess of the figures of the previous triennial period.

The increase is due to the sale of a large number of roadside trees.

The income in the Pesháwar Municipality under the same head was Rs. 6,488, or Rs. 2,114 less, compared with the figures of previous years. The cause of the decrease is chiefly that in 1892-93 the receipts were abnormally increased by the sum of Rs. 1,560, received from the Military Works as compensation for a portion of the Sháhi Bágh land taken up for a military road. Also in the year under report grass was much cheaper than in previous years, and receipts consequently decreased.

Expenditure.—The expenditure on district arboriculture during the three years under report was as follows :—

	Rs.
Ornamental gardens	6,436
Avenues	27,562
Total ...	33,998

The expenditure on the maintenance of ornamental gardens was Rs. 4,570 less than in previous years, the decrease being due to reduction of establishment.

Trees of various descriptions were planted throughout the district at a cost of Rs. 27,562, or Rs. 1,539 in excess of the expenditure of preceding years.

The excess in expenditure is partly due to increased planting operations, and partly to increased cost of watering.

The detail of expenditure incurred on planting avenues, &c., is as follows :—

	Rs.
1 Jemadár at Rs. 11, for 36 months	396
3 Jemadárs „ 10 „	1,080
1 Jemadár „ 12 „	432
13 Jemadárs „ 8 „	3,744
23 Málís „ 7 „	5,796
88 „ „ 5 „	15,840
Avenue planting	102
Digging holes	72
Water-pots	36
Revenue on land taken up for nurseri.	2
Carriage of plants	21
Cost of baskets, &c.	41
Total ...	27,562

The expenditure in the Pesháwar Municipality under the head of "Arboriculture" was Rs. 9,148, or Rs. 9,717 less than in the former period, the decrease being due to reduction of establishment.

General remarks.—In some irrigated parts of the district fruit-trees were planted by private persons, which are getting on well, and much care is bestowed on them. The above planting is chiefly done in the Pesháwar, Mardán and Chársadda tahsíls. Experiments with *Robinia pseudo-acacia* are being made in Cherát.

KOHAT DISTRICT.

Rainfall.—The annexed table shows the rainfall for each of the past six years compared with the average fall for the past 26 years, and the rainfall registered at the outlying stations :—

Year.	1st April to 30th September.	1st October to 31st March.	Total.
KOHAT.			
1890-91	14·46	15·51	29·97
1891-92	5·52	1·21	6·73
1892-93	19·70	5·94	25·64
1893-94	14·42	5·90	19·51
1894-95	17·99	7·82	25·81
1895-96	6·91	4·37	11·28
Average for the past 26 years	11·99	6·31	18·30
HANGU.			
1893-94	30·86	5·68	36·54
1894-95	27·64	6·30	33·94
1895-96	18·46	4·69	23·15
THAL.			
1893-94	12·93	5·53	18·46
1894-95	10·64	7·40	18·04
1895-96	7·22	3·64	10·86
BANDA DAUD SHAH.			
1893-94	18·08	4·63	22·71
1894-95	22·82	7·78	30·60
1895-96	12·93	5·21	18·14
KHUSHALGARH.			
1893-94	9·99	4·39	14·38
1894-95	9·48	8·24	17·72
1895-96	3·95	3·49	7·44

It will be noticed from the foregoing table that the character of the rainfall is precarious, and it is not evenly distributed throughout the district. This is no doubt partly owing to the numerous mountain ranges by which the district is intersected. Except to the north (Hangu tahsíl) and south (Chauntra in the Khattak *iláka*), the rainfall is generally small. Good rain fell in April 1893, but the rainfall of May and June 1893 was scanty, except in the Hangu tahsíl. The July, August and September rains were, however, abnormal. Although the rain failed for three or four months during the year, it was favorable for arboriculture, as very few trees died during the year.

The next year (1894-95), although there was a copious rainfall in July 1894 and at the end of March 1895, was unfavorable to arboriculture. There was little or no rain from April to early in June 1894, and again from September to the end of November 1894. Rain also failed in January and February 1895, in consequence of which the water in the Toi, on which the irrigation of trees mostly depended, ran short, and the trees, especially on the Tappi Bahádar Kote road, suffered greatly, the drought killing most of them.

Again, during 1895-96 there was rain in June and July 1895, and good rain fell in August 1895; subsequently it entirely failed till the end of December 1895. Some rain fell in January, February and March 1896, but the quantity was very small. Owing to prolonged drought, water in the Toi often failed during the year.

Endeavours were, however, made to supply water to the trees by employing extra *málís*, who carried water on mules, but the plan did not work well, as sufficient water could not be obtained from places at reasonable distances; consequently the trees suffered much. It will thus be seen that the triennial period under report was not, on the whole, favorable to the extension of arboriculture.

General remarks regarding the extension of arboriculture.—This district has been classed as one of the very dry districts, and its conditions are not favorable to arboriculture.

The Khattak *iláka* gets so little water that hardly any scheme of arboriculture can be successfully carried on there. In the Bárak Tappa of that *iláka*, however, trees are planted by the people themselves near wells, &c., where possible. In the Hangu tahsíl there is no road in charge of the District Board suitable for establishing avenues, except one mile of road near Gandiaur, which is mentioned further on. The people, however, themselves plant trees, where suitable places can be found, though, owing to the

large herds of goats possessed by every village, much damage is done and comparatively few trees arrive at maturity. Considerable damage to trees is also done by nomad Wazírs and Ghilzaís, who visit the district in the cold weather. During the winter of 1895-96, however, owing to the rates of *tirni*, realised from Ghilzaís, having been enhanced, the influx of these unwelcome visitors was very much restricted.

The only places where any improvements can be effected are, therefore, Kohát proper and its neighbourhood. As far as funds and water were available, endeavours were made to extend arboriculture in this part of the district, but owing to unfavorable circumstances referred to above, only small progress is apparent.

In the preceding triennial period the planting of trees in avenues had been carried out on the following five roads:—

1. Jarwánda circular road.
2. Bezadi circular road.
3. Road from tahsíl gate to meet Hangu road near the Jail.
4. Ditto ditto near Public Works Godown.
5. Ditto ditto Hangu road near Police Lines.

Since then the following additions have been made to the above list:—

1. Tappi-Bahádur Kote road.
2. Kharmatu-Dhoda road.
3. Sheikhán road.
4. Road from tahsíl garden to Gari Mowáz Khan.
5. Road from bridge outside cantonment gate to Hangu road.

Trees have also been planted by the District Board on roads, as below, belonging to the Public Works Department, but they have not been shown in the statements submitted with this report. These will be shown by the Public Works Department in their own returns:—

1 mile on Hangu road near Gandiaur.

4 miles on Hangu road from mile No. 4 to 8.

2 miles on Bannu road from Chikar Kote village to Mírozai village.

As far as funds at the disposal of District and Municipal Boards and the rainfall permitted, fair progress in arboricultural operations was made, during the triennial period under report, under the personal supervision of Mr. Johnson, Vice-President of the District Board, who was ably assisted by the Tahsíldár and Náib-Tahsíldár of Kohát.

Nurseries.—There are two small nurseries on the Jarwánda road, and one in the Municipal garden as before. Except a small nursery on the Samána, and a plot taken up by the Municipality for use as a nursery in the old Mess garden, no new nurseries were started, nor were any given up during the period under report. In the nursery on the Samána, seeds, imported from England, of oak, ash, beech, elm, and horse and edible chestnut were sown during 1894-95, but they were not very successful. Walnuts were also sown: about 510 plants came up, of which about 200 have been distributed amongst border tribes for transplantation.

Two maunds of *kíkar* seed were also obtained from Gujrát, of which 20 seers were sown in October 1895 in seven plots of ground near Kohát as an experimental measure. They grew well, but were eaten up in winter by *makar* (a species of grasshopper). Plots of land have again been prepared, and *kíkar* seeds will be sown again in a few days.

Two seers of *túm* seed were sent for from the Botanical garden at Saháranpur, and a trial was made here in the Municipal garden. The seed sown both in the ground and in pots did not germinate at all. Two thousand *túm* plants were also sent for from Lahore, but they did not do well, owing to insufficiency of water.

Plants were transplanted from the nurseries to the road avenues. The supply in nurseries was not sufficient to meet the demand, and consequently plants were obtained from private gardens at Kohát and Lahore.

The nursery at Hangu, referred to in the last triennial report, was not started. The trees in the nurseries at Kohát consist chiefly of *kachnár, pípal,* mulberry, *shísham, jáman,* walnut, &c.

Avenues.—There are altogther 13 roads on which avenues exist. These comprise an aggregate length of 10·289 miles, which are stocked with 9,112 trees. The annexed statement will show the progress made during each of the past three years in planting trees in avenues in charge of the District and Municipal Boards:—

Name of Road.	Number of trees on 31st March 1890.	Number of trees planted during 1890-91 to 1892-93.	Number of trees died during 1890-91 to 1892-93.	Number of trees remaining on 1st April 1893.	Planted during three years, viz.— 1893-94.	1894-95.	1895-96.	Total.	Number of trees died during three years 1893-94 to 1895-96.	Number of trees remaining on 31st March 1896.
Bezadi	906	1,299	428	1,777	600	80	110	790	285	2,282
Jarwánda	3,313	2,980	1,908	4,385	120	700	210	1,030	*860	4,555
Mírkhweli	...	...	...	...	140	34	10	184	170	14
Dhoda-Kharmatu road	...	...	...	...	290	600	280	1,170	185	985
Tappi Bahádar Kote road	...	...	...	...	...	1,780	...	1,730	1,706	24
Sheikhán road	...	...	...	...	...	340	138	478	28	350
Small roads within Municipal limits ...	...	1,318	774	544	78	135	115	328	70	802

* Includes 700 willow trees which were cut.

Owing to the unfavorable circumstances above stated, no extensive operations could be carried on during the period under report, the tree planting being confined to a few miles on some of the roads near the Kohát station.

In 1893-94 the planting was extended to about 1·98 miles, of which ·155 milo failed, especially on the Bezadi and Mirkhweli roads. Five hundred and three trees out of 1,220 planted during the year failed, owing to the nature of soil not being suitable for mulberry trees.

In 1894-95 4·75 miles were stocked with trees, but the trees died on 2·50 miles of the Tappi-Bahádar Kote road, the soil of which is also not suitable. 1,000 *tún* and 310 *kachnár* trees were planted on the Tappi Bahádar Kote and Sheikhán roads, all of them, except 349 plants, died; most of these plants were obtained from Lahore without any balls of earth round their roots. Arrangements have now been made to extend the area under nurseries, and it is hoped that further plantings will be successful. The soil of the Dhoda-Kharmatu road is apparently suitable for arboriculture, and the plantation on this road was carried on satisfactorily. A small road from the bridge outside the cantonment gate to the Hangu road, and the road from the tahsíl garden to Garhi Mowáz Khan, within the limits of the Kohát Municipality, were stocked with *pípal* and *sarín* trees, and they are flourishing well.

The trees on all the roads within municipal limits are in good condition, and many of them have attained a height of over 25 feet.

In 1895-96 only 3·15 miles were stocked with trees in avenues, of which 1·65 miles failed. One mile, near Gandiaur in the Hangu Sub-Division, was stocked with young seedlings, but they died altogether for want of water. The work done in the avenues consists chiefly of filling up gaps and blanks, and the preservation of trees formerly planted. As the willow trees on the Jarwánda road were planted too near to each other, and formed a tangled jungle, it was thought advisable to cut some of them, to allow free air to the *shísham* and other trees planted lately, and consequently about 700 trees were cut down during the year 1895-96.

About 138 plants were planted on the Sheikhán road. The condition of trees planted during the year is satisfactory; 353 trees out of the total number, 863, planted during the year, died.

Many of the trees were lopped this year on the Jarwanda-Bezadi and on Municipal roads, and the timber produced was sold for only Rs. 7, the rates of fuel being low.

Taking into consideration all the unfavorable circumstances above referred to, there has been a marked improvement in planting trees in avenues. The soil is suitable for mulberry, *pípal*, *ber*, *Eucalyptus*, willow, *shísham* and *tún* trees, and these are all in good condition, except *ber*, which takes a long time to attain maturity. Many of the trees have attained a height of about 40 feet.

Four-thousand eight hundred and forty-five trees were planted on the roads mentioned above, of which 2,604, or 53·71 per cent. died, owing to continued drought, during the year 1895-96.

Method of planting.—The method of planting is the same as printed on page 18 of the triennial report for the preceding period (1890-91 to 1892-93).

Groves.—There are no groves in the district, except two small ones, and nothing has been done to increase the area under this head, as the District Board has a good deal to do in the way of planting trees on roadsides.

Ornamental garden.—There is only one public garden at Kohát, in charge of the Kohát Municipal Board, which has now greatly improved under the supervision of Mr. Johnson. It contains various kinds of fruit-trees, such as guavas, loquats, almonds, peaches, figs, mangoes, *jámans*, plaintains, oranges, pomegranates, plums and limes.

Fruit trees of various kinds, including 25 mango grafts, were sent for in large numbers, and were planted in the Municipal garden. It is expected that many of them will bear fruit next year.

The following statement shows the receipts and expenditure of the garden during the past six years :—

Year.	Receipts.	Expenditure.			Deficit.	Surplus.	Remarks.
		Pay of establishment.	Miscellaneous expenditure.	Total.			
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1890-91	525	436	80	516	9	...	
1891-92	342	448	188	636	294	...	
1892-93	566	572	492	1,064	498	...	
1893-94	615	612	413	1,025	410	...	
1894-95	568	619	285	864	296	...	
1895-96	875	624	245	869	...	6	

The increased expenditure during 1893-94 and 1894-95 is due to a large number of fruit-trees having been obtained from Lahore, to replace those killed by locusts, and to plant in vacant plots.

Flower and vegetable seeds, costing about Rs. 69 and Rs. 241, respectively, were sent for from England, Saháranpur and the Lahore Horticultural gardens.

It will be seen from the above statement that the garden has become a self-supporting one, and it is expected that it will shortly become a source of income to the Municipality.

Vegetables of various kinds are sown in the garden, and the system of supplying *dálís* to the garrison mess and other officers at fixed rates, introduced by Mr. Johnson, has proved a success. The increase in income under this head is due to the better arrangement and close supervision on the part of the above officer, who takes great interest in this work.

Revenue and expenditure.—The annexed statement shows the income and expenditure on account of arboriculture during each of the last three years as compared with the preceding triennial period :—

Year.	Income.	Expenditure on arboriculture.			Remarks.
		Establishment charges.	Miscellaneous charges.	Total.	
	Rs.	Rs.	Rs.	Rs.	
1890-91	37	402	646	1,042	
1891-92	77	350	372	731	
1892-93	30	555	233	788	
1893-94	...	612	364	976	
1894-95	32	1,725	888	*2,613	* Includes Rs. 1,500 sanctioned by Government out of the amount collected on account of grazing dues from the trans-border tribes.
1895-96	77	1,232	549	1,781	

The income realised is on account of sale-proceeds of grass on roadsides; only Rs. 7 was realised from the lopping of trees and sale of timber. As stated in the last triennial report, no large income from lopping, &c., can be expected, as fuel is very cheap and easily procured in this district.

The following establishment was employed during each of the past three years on roads:—

Year.	Number of men employed.	Rate per mensem.	Per annum.	
	DISTRICT FUNDS.	Rs.	Rs.	
1893-94	1 Jemadár	15	180	648
	6 Rangers	33	396	
	1 Bishti...	6	72	
1894-95	1 Jemadár	10	120	1,728
	13 Rangers	65	780	
	1 Bishti...	6	72	
	6 Málís ...	51	612	
	2 Syces ...	12	144	
1895-96	1 Jemadár	10	120	1,284
	1 Ditto	8	96	
	9 Rangers	45	540	
	1 Bishti...	6	72	
	4 Málís ...	32	384	
	1 Syce ...	6	72	
	MUNICIPAL FUNDS.			
1893-94	2 Rangers	12		144
1894-95	Ditto	12		144
1895-96	Ditto	12		144

The increase in expenditure during 1894-95 is due to the planting of a large number of trees in avenues on the Tappi-Bahádar Kote, Kharmatu-Dhoda and Shoikhan roads.

Government sanctioned a grant of Rs. 1,500 per annum from the amount realised from the Ghilzaís and other trans-border graziers for arboriculture in this district, but this sanction was subsequently cancelled on the ground that *tirni*, being land revenue, could not be appropriated for local objects of this sort without the sanction of the Government of India.

The amount of Rs. 1,500 sanctioned for 1894-95 was, however, drawn and expended. A strong representation for an allotment of Rs. 1,500 for arboriculture was again made by Major Leigh in May 1895, but no reply has yet been received to the same. The total expenditure during 1895-96 was Rs. 1,599, against Rs. 959 in the preceding year. The increase is due to the extension of arboriculture along the Kharmatu-Dhoda and Sheikhán roads. The condition of the trees planted during the year is satisfactory. The Sub-Committee appointed for the purpose of supervision did practically nothing, the work being supervised by Mr. Johnson with the assistance of the Tahsíldár and Náib-Tahsíldár. The long continued drought caused many failures among the new plantings. Three hundred and fifty-three trees out of 863 planted during the year under report died.

It will be seen from the above statement that, notwithstanding the *tirni* grant having been stopped, a large allotment was made for arboriculture, and the results are as satisfactory as can be expected under the unfavorable circumstances referred to in the commencement of the report.

Cultivation of fruit-trees and their distribution amongst villagers.—No attempt has hitherto been made to cultivate and distribute fruit-trees among the villagers. The people are themselves anxious to start gardens and plant fruit-trees. Much energy is being displayed by them in planting fruit-trees of different varieties, which are brought annually from Lahore and elsewhere. About 6,000 fruit-trees are reported to have been planted by the people in their gardens, &c. The private gardens are in a flourishing condition and yield a fair return.

The climate and soil of the neighbouring lands of Kohát proper, where there is plenty of water, is specially favorable to the cultivation of fruit-trees. Mr. Johnson tried Calcutta plantains in his private garden. They fruited well, and are, so far, a great success: he has distributed a large number of plants to other private gardens.

As stated in the last triennial report, the Arabian date-palm seedlings, which were distributed among the leading men and agriculturists of the district, proved mostly a failure. In a few places, however, they are doing very well, and four trees in Shahzáda Sultán Ján's garden at Báqizai fruited last year. They are about eight feet in height, and one in Mr. Johnson's garden is now in fruit.

Planting of fodder trees.—Every endeavour has been made to impress upon the people the advantages of village fuel and fodder reserves, and it is hoped that something in this direction may be accomplished eventually. Some villagers, such as Káhi in the Mírúnzai Valley, fully appreciated the benefit to themselves of looking after their *guzárás*. They, however, have the advantage of being free from the nomad graziers, who do so much damage in the winter in this district,

The large majority are, however, apathetic to the last degree, and care nothing so long as their flocks and herds can eke out an existence on the present scanty grazing.

So long as the funds of the district do not permit of a good deal of assistance being given to those who would really take an interest in the matter, any work in this direction must necessarily be very uphill.

All the wood available in the vicinity of the posts on the Samána has been already cut, and each year the supply for the troops on the Samána will get dearer and dearer, as it is brought from places more and more remote. It is evident that it is necessary to plant the neighbourhood of the Samána with quick growing trees, that can be used as fuel, and experiments with the *Robinia pseudo-Acacia* have shown that it will do excellently on the Samána. Seeds sown are in a flourishing condition. Seedlings have also been sent from the Municipal garden and planted at Mastán.

ROHTAK DISTRICT.

Rainfall.—The rainfall of the triennial period for the Sadr station is shown in Statement No. I, the figures of which have been obtained from the Arboricultural Prospect Report, and the rainfall for the outlying tahsíls during the three years may be seen from the subjoined Memo.:—

Name of Tahsíl.	1893-94.	1894-95.	1895-96.
Jhajjar	25·37	29·85	16·26
Sámpla	29·69	34·34	17·09
Gohána	30·97	34·99	13·73

It will be seen that during the years 1893-94 to 1895-96 the highest rainfall was during the first half year of 1893-94, and the lowest in the second half of 1895-96. The rainfall of 1895-96 was 7·44 less than the average of past years.

The annexed statement will show the rainfall during the three years as compared with the figures for the two preceding triennial periods :—

1893-94	46·71
1894-95	34·96
1895-96	12·75
	94·42

First triennial period.

1887-88	30·60
1888-89	21·00
1889-90	9·85
	61·45

Second triennial period.

1890-91	23·57
1891-92	14·86
1892-93	32·28
	70·71

It will be seen from the above that one year in each triennial period was of scanty rainfall against the other two, *i.e.*, the rainfall of two years in each period was above, and of one year below, the average of past years.

The year 1895-96 was far from being favorable for the extension of arboriculture, still the planting was extended to six miles in this year.

Nurseries.—No additions have been made to the existing nurseries, which are five in number, *viz.*, one at the head-quarters of outlying tahsíls and two at the Sadr station, with an aggregate area of 1·93 acres. They furnish plants for filling up gaps, and also for the extension of roadside avenues. At the beginning of 1893-94 there were 1·81 acres of nurseries, to which 3·36 were added during the past three years; and the area given up, or from which plants were removed to roads, amounts to 3·24 acres. 7,459 plants were removed during the past three years to the different roads from the nurseries noted below :—

Nursery at Sámpla		3,459
Do. Jhajjar		1,500
Do. Rohtak		1,500
Do. Gohána		1,000
Total ...		7,459

Groves.—Nothing has been done during the period under report to extend the area under this head, as the District Board has a good deal to do in the way of planting trees in avenues on roadsides.

Avenues.—The total length of roads suitable for avenues was 461·08 at the beginning of 1895-96, of which 28 miles of the Rohtak-Delhi and 18 of Rohtak-Bhiwáni roads have been transferred to the Public Works Department during the year, leaving 415·88 in charge of the Board at the end of the year. A corresponding reduction of 27 and 9 miles, respectively, has been made in the total length of road stocked with trees at the beginning of the year.

During the past three years a total length of 14 miles of avenues has been added to the roads noted below :—

1893-94.	
Sámpla-Kharkhauda Road	4
Delhi-Sirsa Road	2
	6
1894-95.	
Sámpla-Beri Road	2
Jhajjar-Chhúchakwás Road	1
	3
1895-96.	
Sámpla-Kharkhauda Road	1
Jhajjar-Chhúchakwás Road	2
Rohtak-Kharkhauda Road	2
	5

The total length which failed during the three years is 3·50 miles, thus the length of roads fully stocked with live trees at the end of 1895-96 is 196·93.

The number of roads now in charge of the District Board, on which avenues exist, is 27, as shown in the accompanying map, against 29 in the preceding triennial period; the decrease of two is accounted for by the transfer of the Delhi-Sirsa and Rohtak-Bhiwáni roads to the Public Works Department.

The memo. subjoined shows the result of arboricultural operations during the three years :—

Year.	Trees remaining at the beginning of the year.	Trees planted during the year.	Trees died during the year.	Remaining at the close of the year.
1893-94	101,239	3,713	441	104,511
1894-95	104,511	1,039	362	106,088
1895-96	106,088	1,817	835	107,070

The total number of trees planted during the three years under report was 7,469, of which 1,638, or 21·93 per cent., failed. The figures for the three years last reported on are 16,351 planted, of which 2,654 failed. Thus the period now reported on shows a decrease of 8,882 in the number of trees planted, and of 1,016 in the number of failures. The reason why a greater number of trees died in 1895-96, compared with the failure of the two preceding years, is that high winds blew at the end of 1895-96, which did much damage to trees.

The work done in 1894-95, which shows very little progress as compared with the rainfall of that year, consisted chiefly of filling up gaps and blanks, and the preservation of trees planted in 1893-94 on six miles.

Damage to trees by cattle.—To prevent damage by cattle, young trees are protected by thorny fences and mud walls. Cattle found damaging trees are taken to the pound.

Mode of planting.—Seed is sown in nurseries, and the plants are removed when they are from three to five feet high. They are planted mostly in the spring, *i.e.*, 15th February to end of March, and partly in rainy season, and are fenced with thorns. The plants are watered by *bhistís* every second day, till they attain a sufficient height.

Pruning and lopping.—It is carried out, whenever absolutely necessary, by *málís*, who have been supplied with all implements needed for the purpose.

Income and expenditure.—The annexed statement shows the income and expenditure on account of arboriculture during each of the last three years as compared with the preceding three years :-

Particulars.	During					
	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.
Income.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Sale of plants	5	2	...	...	...	...
Loppings of trees	247	1,262	695	1,378	1,663	1,139
Miscellaneous	...	...	321	157	43	110
Total ...	252	1,264	1,016	1,535	1,706	1,249
Expenditure.						
Nurseries	1,146	929	828	689	307	106
Avenues	3,910	5,052	4,838	4,647	3,447	4,490
Establishment	276	324	171	88	80	...
Total ...	5,332	6,305	5,837	5,424	3,834	4,596

The period now reported on shows an increase of Rs. 1,958 in the income and a decrease of Rs. 3,620 in the outlay, as compared with the figures of the preceding triennial period. The increase in income is due to the sale of a large number of trees which were blown over by storms, and the decrease in outlay is attributable to the fact that, when rain fell, the services of *bhistís* were dispensed with.

Establishment.—The following establishment was employed in each tahsíl during the past three years for the maintenance of trees on different roads:—

Name of Tahsíl.	Málís.	Bhistís.
Rohtak	8	11
Gohána	8	8
Jhajjar	9	16
Sámpla	8	7
Total ...	33	42

7980

Date-palm.—During the course of the past three years 694 seedlings were sent from the Sadr station to the Tahsíldárs of Jhajjar, Sámpla and Rohtak, as per detail below, for distribution among agriculturists and for planting at different places experimentally, but I regret to say that there has been complete failure everywhere :—

Tahsíl Jhajjar	479
Do. Sámpla	65
Do. Rohtak	150
Total	694

Of the total number about three-fourths have dried up and the remainder are not likely to grow to maturity. The failure is due to scanty rainfall, and also to the unsuitable soil.

Kíkar seed sown in reserved portions of Bírs.—About 60 *bighás* were put under *kíkar* seed in the Bír Súnarwála Khurd, as reported in the report for the past triennial period, but it is a matter of much regret that there has been no result for want of rain.

LAHORE DISTRICT.

Rainfall.—The following table shows the rainfall for each tahsíl during the past three years :—

Name of Tahsíl.	1893-94.	1894-95.	1895-96.
Lahore	31·21	10·57	9·94
Kasúr	32·03	18·61	10·34
Chunián	15·66	18·73	8·25
Sharakpur	25·57	17·46	7·27

The very scanty rainfall of 1895-96 has very materially retarded the growth of young trees, and in places where moisture is very deficient the trees have suffered; otherwise the condition of the avenues of the district is reported by Tahsíldárs to be satisfactory. The district arboricultural establishment was principally employed on watering and tending roadside trees.

The formation of new nurseries and planting of roadside groves of shelter-giving trees receives all the attention that is possible with the available funds.

During the past three years a total length of 40·062 miles of avenues, including 10·46 transferred to the Lahore Provincial Division, has been added to the roads of the district. The following kinds of trees are used, *viz.*, *shísham*, *farásh*, *kíkar* and *tút*, *shísham* predominating.

This, however, does not include tree planting operations within municipalities.

The following is the detail of lengths added in each of the four tahsíls :—

Name of Tahsíl.	1893-94 to 1895-96.	1890-91 to 1892-93.
Lahore	17·250	12·246
Kasúr	...	12·281
Chunián	5·769	7·887
Sharakpur	27·50	2·000
Total	25·769	34·414

Fruit-trees were planted by the following persons in—

Tahsíl Chunián.

Mahant Sarwar Náth, at Mula Chor.
Búta Singh, son of Sajjar, at Monjeke.

Tahsíl Lahore.

Bábu Ghulám Muhay-ud-dín of Bághbánpur.
M. Chanan Dín, of Bághbánpur.
M. Dín Muhammad, of Bághbánpur.
Muhammad Bakhsh of Bághbánpur.
Mangal Singh, of Húdiára.
Jaimal Singh, of Nathoke.
Hákim, of Sahjpál.
Iláhi Bakhsh, patwári, at Naulakha.
Muhammad Bakhsh, do.
Núr Muhammad, Kassáb, of Khawája Said.
Muhammad Bakhsh, of Niázbeg.
Nawáb Násir Ali Khan.
Diwán Narindar Náth, at Ajudhiapur.
Míran Bakhsh, at Lahore.
Natha Singh, of Bhogiwál.
Nizám Dín do.

The Sub-Overseers at Kasúr and Chunián and the Veterinary Assistants at Tahsíls Lahore and Sharakpur supervised all planting operations in addition to performing their own duties.

The following shows the establishment employed and its cost during the past three years :—

Name of Tahsíl.	Establishment.			Cost.		
	1893-94.	1894-95.	1895-96.	1893-94.	1894-95.	1895-96.
				Rs.	Rs.	Rs.
Lahore	10	14	14	622	815	921
Kasúr	13	14	13	866	879	793
Chunián	9	10	11	444	563	605
Sharakpur	10	11	12	534	694	720
Total	42	49	50	2,266	2,951	3,049

A reference to the detailed statement of expenditure will show that out of Rs. 5,804, Rs. 5,107 and Rs. 4,014, expended during the past three years, Rs. 2,266, Rs. 2,951 and Rs. 3,049, respectively, were for establishment.

The financial results of the period under report, excluding the income and expenditure on gardens, will be found in the following statement :—

Name of Tahsíl	Income.			Expenditure.		
	1893-94.	1894-95.	1895-96.	1893-94.	1894-95.	1895-96.
				Rs.	Rs.	Rs.
Lahore	434	272	269	2,391	1,259	1,042
Kasúr	241	243	1,330	1,507	1,875	1,113
Chunián	389	179	502	661	755	748
Sharakpur	81	321	59	1,245	1,218	1,111
Total	1,145	1,015	2,160	5,804	5,107	4,014

KARNAL DISTRICT.

Rainfall.—It will be observed from this statement that, though the rainfall for the last three years has been above the average of past years, there was no rain from October to the end of the year 1895-96, and drought prevailed for a portion of the year.

Nurseries.—No new nurseries were established during the period under review; the three existing nurseries, *viz.*, at Karnál, Pánipat and Kaithal, comprising an area of 8·53 acres, contained 7,100 young trees at the end of the year 1895-96. The number of trees supplied by these nurseries for planting on different roads in the district amounted to 3,123 during the past three years. The nurseries in question are irrigated from wells.

Groves.—There is nothing new to record in the matter of groves, the number of which is the same as existed in the previous triennial period, *viz.*, 15. These comprise an area of 317·37 acres. The number of trees that existed in these groves at the end of the year 1892-93 amounted to 3,304, of which 720 died during the period under report, while 614 were newly planted. Thus the 15 groves contained 3,198 trees in all at the end of March 1896.

Avenues.—Avenues are being extended, as far as possible, on the principal lines of communication in the district.

The operations for the past three years were as follows:—

1893-94.

Nil.

1894-95.

	Miles planted.	*Number of trees planted.*
Karnál-Asandh Road	0·37	220

1895-96.

Karnál-Indri Road	2·	500
Road leading to Naisang Rest-house	0·18	100
Do. Pánipat Sessions-house	0·18	100
Pánipat-Rohtak Road	0·18	100
Pánipat-Barsat Road	0·18	100
Pánipat-Nagla Road	0·90	50
Pánipat-Salwán Road	0·37	200
Pánipat-Allupur Road	0·18	100
Road leading from Pánipat Sessions-house to Gadiwárá	0·18	100
Total ...	4·35	1,350

Besides the above, 1,653 young trees were planted on various roads to fill up gaps.

The number of trees that died during the triennial period amounts to 3,161. This includes 347 old trees sold during the period, belonging to the Indri and Thánesar Road, which has been abandoned.

Fences.—Young trees planted on roads are protected by thorns and mud walls. Besides, they are taken care of by *málís* and *chaukidárs* appointed for the purpose. Cattle found damaging trees are impounded under the Cattle Trespass Act and sent to the nearest cattle-pound.

Lopping.—Lopping of trees is only resorted to when this is found to be absolutely necessary. Trees are usually planted out in February, and also during the rains.

The subjoined memo. exhibits the results of the arboriculture operations of the past three years:—

Year.	Trees remaining at the beginning of the year.	Trees planted during the year.	Died during the year.	Remaining at the close of the year.
1893-94	29,053	596	992	28,657
1894-95	28,657	614	910	28,361
1895-96	28,361	2,013	1,259	29,115

Income and expenditure.—The table below exhibits the income and expenditure for the past three years—

Particulars.	During			Total.	Surplus.	Deficit.
	1893-94.	1894-95.	1895-96.			
Income.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Sale of fruit and vegetables	226	253	226	705		
Sale of trees	410	2,571	1,966	4,947		
Lopping of trees	96	1	15	112		
Sale of grass	37	161	19	217		
Total	769	2,986	2,226	5,981		
Expenditure.						
Nurseries						
Establishment	305	290	309	904		
Cost of feed of bullocks, &c.	96	41	50	187		
Repairs to wells, huts, &c.	3	...	...	3		
Miscellaneous	84	326	232	642		
Avenues.						
Supervising establishment	684	684	684	2,052		
Watering charges	2,748	2,475	2,672	7,895		
Protecting charges	360	360	360	1,080		
Tools and plants	13	28	30	71		
Planting, fencing and other miscellaneous expenses.	120	20	477	617		
Total	4,413	4,224	4,814	13,451	...	7,470

Date-palm.—The result of the experiments made with the Egyptian date-palm has not been very successful. There are, however, about 70 plants, grown from seed, still alive and doing well. They have grown to a height of about 5 or 6 feet. Besides these, a few plants, obtained from the off-sets, received from Egypt in 1891, exist, and these also are in good condition.

JHELUM DISTRICT.

Rainfall.—The average rainfall in each tahsíl of this district during the three years der report was as follows:—

Name of Tahsíl.	1893-94.	1894-95.	1895-96.	Average.
Jhelum	50·90	42·72	19·17	37·63
Pind Dádan Khan	24·07	25·49	12·76	20·77
Chakwál	32·31	30·64	22·18	28·37
Talagang	23·49	22·56	20·40	22·15
Total	130·86	121·41	74·51	108·93
Average	32·71	30·35	18·62	27·23

The average rainfall for the three years now reported on was greater than that of the three years last reported on, notwithstanding that the rainfall of the year 1895-96 was far below that of the two previous years.

Nurseries.—The additional area brought under nurseries during each year under report was as follows:—

	Acres.
In 1893-94	0·810
In 1894-95	1·337
In 1895-96	0·188

The large additional area brought under nurseries in 1894-95 was chiefly in gardens.

The plants raised in nurseries consisted chiefly of fruit and *shísham* trees, the former being raised from cuttings, and the latter from seed.

Groves.—There was no alteration in the area under "groves" during the three years under report.

Avenues.—During the years under report the planting on roadsides was as given below:—

Roads.	Years.	Total area newly planted.	Total area failed.
Belonging to District Board	1893-94 ...	10·188	0·609
	1894-95 ...	19·213	1·295
	1895-96 ...	11·024	0·344
Belonging to Municipal Committees	1893-94 ...	0·467	0·055
	1894-95 ...	0·420	0·185
	1895-96 ...	2·396	0·514

District Board.—The large increase in 1894-95 was due to extensive planting on the road from Chakwál to Modra, 1,500 trees being newly planted on this road alone, and also to the planting of 690 trees on the new road from Dína to Sheikhupur.

Municipalities.—The increase in 1895-96, as compared with the two previous years, was due to a want of seedlings in those years. By 1895-96 a number of seedlings were raised, and the short planting in the other two years was made up.

The statement given below shows the number of trees which were planted and the number that failed during each year of the period now under report:—

DISTRICT BOARD.

Name of Tahsíl.	1893-94.		1894-95.		1895-96.	
	Planted.	Failed.	Planted.	Failed.	Planted.	Failed.
Jhelum	840	60	1,350	110	752	...
Pind Dádan Khán	544	4	328	13	1,002	76
Chakwál	351	61	2,009	63	339	...
Talagang	430	20	453	110	280	...
District Board Total ...	2,165	145	4,140	296	2,463	76

MUNICIPALITIES.

Name of Municipality.	1893-94.		1894-95.		1895-96.	
	Planted.	Failed.	Planted.	Failed.	Planted.	Failed.
Jhelum	...	...	...	...	380	80
Pind Dádan Khán	241	29	222	98	125	32
Municipal Total ...	241	29	222	98	505	112
GRAND TOTAL ...	2,406	174	4,362	394	2,968	188

The total number of trees planted during the three years under report was 9,736, of which 756, or 8 per cent., failed. The percentage of failure, as compared with that of the three years previously reported on, is exactly half.

The trees planted on roadsides in the Jhelum tahsíl were obtained from the Pira Ghaib Bela and the Sheikhupur and Chak Jamál gardens; in the Pind Dádan Khan tahsíl from the Choa Saidan Shah garden; in the Chakwál tahsíl from small nurseries on the roadsides; and in the Talagang tahsíl from nurseries near the private wells of *samindárs*.

All trees are looked after by the general establishment, and are inspected from time to time by the Tahsíldárs, and by all district officers when on tour.

The income for the years under report is detailed in the statement below:—

Year.	Gardens.	Nurseries.	Total.
	Rs.	Rs.	Rs.
1893-94	886	2,346	3,032
1894-95	1,162	2,736	3,898
1895-96	893	1,911	2,804
Total	2,741	6,993	9,734
Total income from 1890-91 to 1892-93	1,827	5,193	7,030

The above figures show an increase of Rs. 2,734 during the three years under report.

Expenditure.—The statement given below gives the details of the expenditure during the three years under report:—

Years.	Gardens.	Nurseries.	Total.
	Rs.	Rs.	Rs.
1893-94	3,401	2,675	6,076
1894-95	2,747	2,568	5,315
1895-96	2,917	3,080	5,997
Total	9,065	8,323	17,388
Total expenditure during 1890-91 to 1892-93	9,269	9,676	18,945

The above figures show a decrease of Rs. 1,557 as compared with the expenditure of the three previous years.

The following statement gives the details of the establishment maintained during the three years under report:—

Tahsil.	Gardens.					Nurseries.					
	Mális on				*Coolies & Bhistís on*	*Daroghas on*	*Jamadárs on*	*Pakhálís on*			*Coolies & Bhistís on*
	Rs. 25.	Rs. 12.	Rs. 8.	Rs. 6.	Rs. 5.	Rs. 20.	Rs. 10.	Rs. 12.	Rs. 8.	Rs. 7.	Rs. 5.
Jhelum	1	...	...	1	12	...	1	...	...	...	13
Pind Dádan Khán	...	1	...	..	3	...	...	1	3	...	3
Chakwál	...	...	1	...	2	1	...	...	...	4	...
Talagang	...	...	...	...	1	...	...	...	...	2	5
Total ...	1	1	1	1	18	1	1	1	3	6	21

After deducting the total income for the three years from the expenditure for the same period, the net expenditure stands at Rs. 7,654, or an average of Rs. 2,551 per annum.

GUJRANWALA DISTRICT.

Rainfall.—The rainfall during the year 1893-94 was abundant and in excess of the average, being very favorable for tree planting operations; during 1894-95 it was only a little above the average and, on the whole, beneficial to arboriculture; that during 1895-96 was scanty and below the average.

The total rainfall in each of the three years under review was 43·32, 28·42 and 19·53, respectively. The extra rainfall in 1893-94 and 1894-95 enabled the District Board to plant new trees on 33·55 and 23 miles of roads, respectively, while none were planted during 1895-96, except to fill up gaps and blanks, as the rainfall was very scanty.

Nurseries.—While at the beginning of 1893-94 2·47 acres of land were reported to be under nurseries from the previous year's operations, a fresh area of 164·80 acres of land was added during a period of three years, *i. e.*—

1893-94	... ...	164·76
1894-95	... ...	0·04

Of this, 164·44 acres were brought under nurseries in the Khángah Dográn tahsíl alone and 0·32 acres in the Gujránwála and Wazírabad tahsíls.

The net area at the close of 1895-96 was, however, 164·44, 2·83 having been partly transferred to groves and partly transplanted during the three years under report.

The addition of 164·76 acres of land under nurseries shown against Khángah Dográn was only a nominal one, as this area represents the area covered by nine nurseries in the Chenáb Canal colonization area, reported to be existing in the previous years, but which was omitted from those returns.

The detail of this area is as follows :—

1.	Village Karkan	12·04
2.	Do. No. 167	13·02
3.	Do. Pakka Dalla	8·00
4.	Do. Shahkot	7·07
5.	Do. Baddomali	38·00
6.	Do. Moman	27·06
7.	Do. No. 2	16·17
8.	Do. Bijwana	16·08
9.	Do. Sangla	27·00
	Total	164·44

The total expenditure incurred on the maintenance of these nurseries during 1893-94 to 1895-96 amounted to Rs. 1,746, Rs. 878 and Rs. 828, respectively, while the water was supplied by the Irrigation Department free of cost.

A variety of trees are now growing in these nurseries, but *kikar* and *shísham* preponderate, and it is proposed that the settlers should be allowed to use the nurseries for transplanting.

Groves.—During 1894-95 an area of 1·51 acres of land under nurseries in the Háfizabad tahsíl was transferred to *groves*, as the trees were too old to be transplanted. No addition or reduction was made during the subsequent year, and the area remained the same as at the end of 1894-95.

Avenues.—Planting operations were extensively carried on in 1893-94 and 1894-95. In 1893-94 the length of roads suitable for avenues was increased by 69 miles, 40 miles being in the Gujránwála tahsíl, 9 in the Wazírabad tahsíl, and 20 in the Khángah Dográn tahsíl, making the whole length suitable for planting 457·83 miles. Of this, 113·03 miles were already stocked with trees in the previous years and 33·55 miles in this year, *i.e.*, 23·55 miles in Tahsíl Gujránwála, 1 mile in Wazírabad, and 9 miles in Khángah Dográn tahsíl, while 4·59 miles failed altogether in the Háfizabad tahsíl.

In 1894-95 23 miles more were planted with trees, *i.e.*, 8 miles in Tahsíl Gujránwála, 5 in Wazírabad, 3 in Háfizabad, and 7 in Khángah Dográn Tahsíl.

In 1895-96 no new trees were planted owing to the scarcity of rain.

The total length of roads thus stocked with trees at the end of the year remained the same as in the beginning of the year, *viz.*, 164·99 as follows :—

Tahsíl Gujránwála	91·00	miles.
Do. Wazirabad	30·50	„
Do. Háfizabad	27·49	„
Do. Khángah	16·00	„
Total	164·99	„

The following is the detail of the roads fully stocked with trees at the close of the year 1895-96 :—

1.	Gujránwála-Rámnagar	9·25	miles.
2.	Gujránwála-Háfizabad	28 42	,,
3.	Gujránwála-Siálkot	6·50	,,
4.	Gujránwála-Shekhupura	15·00	,,
5.	Gujránwála-Khángah	9·20	,,
6.	Gujránwála-Kariál	5·00	,,
7.	Gujránwála-Emínabad	9·00	,,
8.	Gujránwála-Dinanagar	4·00	,,
9.	Gujránwála-Vanike	7·00	,,
10.	Wazírabad-Pindi Bhattián	17·00	,,
11.	Dhaunkal to Grand Trunk Road	1·00	,,
12.	Sohdra to Siálkot	0·50	,,
13.	Wazírabad to Daska	6·00	,,
14.	Manchar to Háfizabad *viâ* Akálgarh	5·17	,,
15.	Kalaski to Chinawán	2·46	,,
16.	Ahmadanagar to Khánki	3·00	,,
17.	Kalaski to Ahmadanagar	0·50	,,
18.	Háfizabad to Vanike	7·00	,,
19.	Háfizabad to Sukheki	2·00	,,
20.	Háfizabad-Khángah	5·00	,,
21.	Háfizabad-Shekhupura	1·99	,,
22.	Shekhupura-Pindi Bhattián	1·00	,,
23.	Háfizabad-Jalálpur	5·00	,,
24.	Khángah-Shahkot	7·00	,,
25.	Khángah-Ajriánwála	3·00	,,
26.	Khángah-Pindi Bhattián ..1	2·00	,,
27	Khángah-Shekhupura	2·00	,,
	Total	164·99	,,

Thus good progress is shown in planting trees on the roads in the Khángah Dográn tahsíl. In Háfizabad, as well as Khángah Dográn tahsíl, the roadside trees are watered by the Chenáb Canal, but a number of *bhistís* are also employed to look after such trees as cannot be irrigated by the above canal.

In the Gujránwála and Wazírabad tahsíls the trees are watered by *bhistís* only.

An establishment, consisting of four *bhistís*, is working in the Gujránwála Municipality, where several trees have been planted on the circular road. No other Municipal Committee has seriously considered the question of providing its roads with trees. The subject has, however, been put before them with a view to invite their co-operation in the matter.

Method of tree planting.—The planting of trees and seedlings in this district is carried out in the months of January and February in the cold weather, and July and August in the hot weather. Seedlings from two to four feet in height are dug up with a lump of earth attached, and then transplated three feet apart from each other and protected by thorn fencing from cattle. In some places mud walls, about four or five feet high, are made for the purpose of protecting young trees, until they attain a sufficient height to be safe from the attacks of cattle. Some of the trees on the station roads have been provided with iron bar fencing as an experiment.

Young trees are watered every third day during the summer, and after every fifth day in winter. The species most suited to the soil of this district are *kíkar, shísham* and tamarisk, but only the two former are now allowed to be cultivated.

Fruit-trees.—No fruit-trees were planted during the years under report on any roads in the district.

There are about 85 plants of Egyptian date-palms at the station garden, which seem to be in good condition, having attained a height of four to five feet; but, generally speaking, very little attention is paid to the cultivation of fruit-trees in this district, private enterprise being restricted to a few gardens here and there.

The District Board of Gujránwála maintains five gardens at present—

One at the Sadr Station;
One at Tahsíl Gujránwála;
One at the Sessions-house;
One at Háfizabad;
One at Khángah Dográn.

The garden at the Sadr station is the largest and covers an area of about 20 acres, and those at Gujránwála, the Sessions-house and Háfizabad are small ones. The garden at Khángah Dográn was planted only recently, but promises to be a success. The chief source of income is derived from the sale-proceeds of Malta oranges, which form the staple produce of the garden, and are very largely cultivated throughout the district, both by the District and Municipal Boards, and by private persons.

The gardens maintained by the Local Bodies are more or less ornamental, the income derived from the sale of fruit and vegetables being far below the expenditure incurred.

The Municipal Committee of Gujránwála maintains four gardens, two being only orchards; the principal source of income being, as already remarked, the sale-proceeds of Malta oranges.

The Municipal Committees of Wazírabad and Rámnagar also keep up small gardens, but there is little or no income derived from them.

The establishment employed for the different roads and gardens described above is as follows:—

Detail of establishment employed for the maintenance of roadside trees.

Number.	Name of Tahsíl, &c.	Establishment.	Annual expense.	Remarks.
			Rs.	
1	Station roads	1 Jamadár, at Rs. 3 per mensem	36	
		5 Bhistís, at Rs. 4-8-0 „ „	270	
		Total ...	306	
2	Tahsíl Gujránwála ...	1 Jamadár, at Rs 10 per mensem	120	
		18 Bhistís, at Rs. 5 „ „	1,080	
		Total ...	1,200	
3	Tahsíl Wazírabad	1 Jamadár, at Rs. 7 per mensem	84	
		10 Bhistís, at Rs. 5 „ „	600	
		2 Do. at Rs. 4 „ „	96	
		Total ...	780	
4	Tahsíl Háfizabad	1 Jamadár, at Rs. 10 per mensem	120	
		14 Bhistís, at Rs. 5 „ „	840	
		Total ..	960	
5	Tahsíl Khángah Dográn ..	1 Jamadár, at Rs. 10 per mensem	120	
		14 Bhistís, at Rs. 6 „ „	1,008	
		Total ...	1,128	
6	New Colonies on the Chenáb Canal.	3 Mális, at Rs. 9 per mensem ...	324	
		6 Coolies, at Rs. 7 „ „ ...	504	
		Total ...	828	

Detail of District Board's garden establishment.

Number.	Garden.	Establishment.	Annual amount.	Remarks.
			Rs.	
1	Sadr garden	1 Máli, at Rs. 12 per mensem ...	144	
		10 Coolies, at Rs. 5 „ „ ...	600	
		Total ...	744	
2	Sessions-house garden ...	1 Máli, at 4 (sharo) per mensem	48	
		2 Coolies, at Rs 5 „ „	120	
		Total ...	168	
3	Tahsíl garden, Gujránwála	1 Máli, at Rs. 6 per mensem ...	72	
		1 Cooli, at Rs. 4 „ „ ...	48	
		Total ...	120	
4	Tahsíl garden at Háfizabad	1 Máli, at Rs. 7 per mensem ...	84	
		1 Máli, at Rs. 5 „ „ ...	60	
		Total ...	144	
5	Tahsíl garden at Khángah Dográn.	1 Máli, at Rs. 10 per mensem...	120	
		2 Coolies, at Rs. 6 „ „ ...	144	
		Total ...	264	

Financial results.—The following table shows the income and expenditure on arboriculture and gardens during the three years under report :—

Year.	Income.	Expenditure.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
1893-94	2,002	8,505	..	6,503
1894-95	2,480	8,896	..	6,416
1895-96	2,095	8,255	...	6,160

The figures shown above are explained as follows :—

Income, 1893-94.—Out of Rs. 2,002, Rs. 1,237 were realised on account of sale-proceeds of garden produce, including Malta oranges, and Rs. 631 on account of sale-proceeds of dry trees on roadsides, and Rs. 134 are on account of fines from *bhistís* and other miscellaneous income.

1894-95.—Rs. 1,177 represent sale-proceeds of garden produce, and Rs. 1,231 sale-proceeds of roadside trees, and Rs. 72 as miscellaneous.

1895-96.—Rs. 912 were realised on account of garden produce, Rs. 15 on account of grass sold at the nurseries in the Chenáb Canal colonisation area, Rs. 1,142 on account of sale-proceeds of dry wood, and Rs. 26 on account of sale-proceeds of old and unserviceable bullocks at the station garden.

Expenditure, 1893-94.—Out of Rs. 8,505, Rs. 2,810 were spent on the maintenance of gardens, Rs. 1,746 on the maintenance of 9 nurseries in the colonization area of the Chenáb Canal, Rs. 3,117 were spent on the maintenance of roadside trees, Rs. 400 on account of planting new trees, and Rs. 432 as pay of jamadárs who supervised the work of *bhistís*.

1894-95.—During this year Rs. 2,722 were incurred on the maintenance of gardens, Rs. 878 on the maintenance of nurseries in the Chenáb colonization area, Rs. 45 on new nurseries, Rs. 3,567 on the maintenance of the roadside trees, Rs. 1,225 on planting new trees, and Rs. 459 as pay of the jamadárs who looked after the *bhistís*.

1895-96.—Out of Rs. 8,225, Rs. 2,751 were spent on the maintenance of gardens, Rs. 828 on account of colonization nurseries, Rs. 4,247 on roadside trees, and Rs. 429 on account of pay of jamadárs.

The figures cited above show that the District Boards spent large sums of money on arboriculture, while the profits in return were comparatively small.

Lála Pindi Dás, Tahsíldár of Khángah Dográn, deserves much credit for the interest he has displayed in arboriculture and horticultural work.

GURGAON DISTRICT.

Rainfall.—The rainfall for the three years under report, *viz.*, 1893-94 to 1895-96, has been good. During each of the first two years the rainfall was above the average, but in the latter year a scanty rainfall was experienced throughout the district. The total rainfall for the three years is 83·11 inches.

Nurseries.—The area under this head at the beginning of 1893-94 was 3·11 acres, but from time to time nurseries have been abandoned, no doubt owing to their being in places where they were not under good supervision, and now there is nothing to show in the way of nursery gardens. The old system of each tahsíl having its own nursery garden is after all the best arrangement, and I will re-introduce it.

Plantations.—The area taken up for plantation purposes was 2,156·343 acres, of which only 114·812 acres had been successfully stocked at the beginning of 1893-94. No further sowings were made during that year, but in the year following 13·468 acres were planted at Banjar Guraora in the Rewári tahsíl. However, the whole of this area proved a failure for want of rain, but it was given another trial in 1895-96, with no better results, due a great deal to the difficulty of supervising the watering of the plants.

Groves.—There have been no additions to this head, the area occupied at the beginning of 1983-94 was 285·39 acres.

Avenues.—The total length of roads, *bands* and distributaries planted with trees at the commencement of 1893-94 was 253·80 miles. To this a length of 6·9 miles on the Gurgáon-Ferozepore and Núh-Palwal roads was added during the year, with very poor results, a distance of three miles failing on both roads. The year following 18·14 miles were added to the following roads :—

		Miles.
1.	Núh-Rewári	4·90
2.	Bahora-Taoru	6·06
3.	Palwal-Hattín	5·18
4.	Gurgáon-Ferozepore	2·00

But, with the exception of a length of one mile, the whole of the plantings failed. In 1895-96 the Ferozepore-Núh and Ferozepore-Ulwar roads were planted for about 1·25 miles with greater success, only ·5 mile failing on each road.

Income.—The total income for the three years ending 1895-96 was Rs. 12,974. The figures of the two former years compare favorably, except for groves and avenues, where there is a decrease of Rs. 930 in 1894-95. This is due to the very large amount received the previous year for the trees and loppings of trees on the railway station road. In 1895-96 a considerable increase under ornamental gardens is due to the arrangement of hiring out the station garden bullocks, but this practice had to be discontinued, as the garden was suffering from want of water, and fruit, trees, &c., were being destroyed ; moreover, this is not a legitimate source of income, and cannot be shown under it.

Under miscellaneous an item of Rs. 50 is for fines, &c., imposed and recovered.

Expenditure.—The total expenditure for 1893-94 and 1894-95 is stationary, but a general reduction of establishment was considered necessary, and was carried out in 1895-96. The services of the Forester and Dárogha were dispensed with, and a number of *bhistís* and *málís* discharged. The loppings, which were formerly carried out by coolie labour, are now done by the *málís* in charge of the roads.

AMRITSAR DISTRICT.

Rainfall.—In 1893-94 and 1894-95 the rainfall was fair, and the result of plantings satisfactory. The year 1895-96 was, on the whole, an unfavorable one for arboriculture, owing to the failure of the summer and winter rains, and in consequence a good number of young trees perished on roadside avenues.

Avenues.—The work of the triennial period on roads is shown in the following statement :—

Year.	Length of roads fully stocked with trees at beginning of the year.	Length of roads planted during the year.	Length of road which have failed during the year.	Length of roads fully stocked with trees at end of the year.
1893-94	167·85	14·55	11·23	171·17
1894-95	171·17	14·03	13·43	171·77
1895-96	171·77	12·82	12·08	172·51

The total mileage of roads stocked with trees was 167·85 at the beginning of the year 1893-94, and 172·51 at the close of the year 1895-96, showing an increase in mileage of 4·66 during the triennial period.

Description of work done.—The following tabular statement shows the number of trees planted, the number that died, and the number now standing :—

Name of Road.	1893-94.			1894-95.			1895-96		
	Planted.	Died.	Remaining.	Planted.	Died.	Remaining.	Planted.	Died.	Remaining.
Filling gaps on district roads	4,095	3,240	855	4,545	3,575	970	3,550	2,978	572
Ajnála-Rámdás road, 4 miles	1,560	320	1,240	...	...	...	...	...	...
Sri-Hargobindpur road, ¼ mile	..	...	...	...	...	...	250	40	210
Jandiála-Vairowál road, ¼ mile	...	...	...	...	...	...	280	40	240

The operations of the Amritsar Municipality, besides covering the work of filling up gaps and replacing failures, included an extension to its avenues of 2·85 miles, 1·77 miles in 1893-94 and 1·08 miles in 1894-95, making the total length of roads fully stocked at the end of the triennial period ending 1895-96 51·12 miles, compared with 48·27 miles at the close of 1892-93.

Groves.—The area remains the same as in the previous years, viz., 3·37 acres.

Plantations.—There have been no additions to municipal plantations.

Nurseries.—In 1894-95 5·75 acres of *kikar* were sown broadcast along the road from Mehta to Gaggar Bhán, a distance of 4 miles, where the soil is suitable for *kikar* planting, a large proportion have sprung up to a height of over 2 feet.

Government gardens.—During the period under report the municipality maintained the well known Rámbágh gardens and the Nicholl and Aitchison parks, situated outside the city, and inside the city the Sant Singh Dháb and the Kaiseri gardens.

Cattle-trespass and lopping.—The following table shews the number of cattle impounded for injuring roadside trees and the amount of fines realized :—

Year.	Sheep and goats.	Cows and bullocks	Buffaloes.	Amount of fines.
				Rs.
1893-94	622	218	54	120
1894-95	574	228	66	126
1895-96	548	222	56	118

The lopping of trees was carried out throughout the district during the months of December, January and February.

Financial results.—The average annual income and expenditure for the three years under report was Rs. 2,412 and Rs. 7,439, respectively, against Rs. 2,035 and Rs. 7,515 in the preceding three years; this shows an increase in the income of nearly Rs. 400 per annum, the expenditure remaining nearly the same as in the preceding triennial period.

Work done by private persons.—The interest taken by *zamíndárs* and land-holders in the development of arboriculture appear to be on the increase, and it is satisfactory to note that, in the vicinity of the Amritsar city, during the past three years, a number of fruit gardens have been planted by private persons. Besides this, the *zamíndárs* in the district have taken to planting *banjar* lands with *kikar*, which is a move in the right direction, and if they continue to show a lively interest in the same, they will, in time, be owners of valuable timber lands.

DELHI DISTRICT.

Rainfall.—The average rainfall of past years was 25·11 in the summer season from 1st April to 30th September, and 2·97 in the winter season from 1st October to 31st March. The rainfall during the three years under report was 27·70, 29·74 and 14·26, respectively, in the summer season, and 5·78, 10·48, and 1·89 in the cold weather. It was thus heavy in the second year, and scanty in the third year.

Nurseries.—The work done under nurseries is exhibited in the following table :—

Period.	Area of Nurseries.			
	At beginning of period.	Added during period.	Deducted during period.	Balance.
	Acres.	Acres.	Acres.	Acres.
1890-91 to 1892-93	2·24	1·22	1·78	1·68
1893-94 to 1895-96	1·68	0·51	1·43	0·76

There were four nurseries at the beginning of the period under report, namely, at Mehrauli, Safdarjang's Tomb, Faridabad, and on the Sonepat-Bahalgarh road. The first two were transferred to groves, and the third was given up. The fourth nursery was slightly extended, and four new nurseries were formed; namely, on the Delhi-Najafgarh road, and the north branch road, Faridabad, and at Mehrauli and Safdarjang's Tomb. Thus, although the area under nurseries was less as compared with the previous period, there was an increase of one in the number of nurseries.

There are no nurseries in the Delhi Municipality. Young plants for roadside planting are obtained from private gardens.

Plantations.—The following statement shows the operations carried out in plantations :—

Year.	Areas taken up for plantations at beginning of period.	Area of Plantations.			
		Stocked at beginning of period.	Added during period.	Failed during period.	Balance.
Municipality.	Acres.	Acres.	Acres.	Acres.	Acres.
1890-91 to 1892-93	938·73	938·53	0·20	...	938·73
1893-94 to 1895-96	938·73	938·73	...	...	938·73
District.					
1890-91 to 1892-93	998·61	578·00	167·24	133·47	611·77
1893-94 to 1895-96	1,023·15	611·77	147·49	182·87	576·39

The area of the *bela* plantation in the Delhi Municipality, as shown above, remained unaltered, and no area was planted during the period under report.

In the district 611·77 acres (column 3) were stocked at the beginning of the period; namely, the Tilauri *rakh* 581 acres, the Mehrauli plantation 17 acres, and *bands* 13·77 acres. Seeds were sown in 140 acres in the Tilauri *rakh*, and in 7·49 acres on *bands*, during the period under report, but failed in 180 acres in the *rakh*, owing to floods of the River Jumna, and in 2·87 acres on *bands*. There was thus a decrease of 35 acres in the area under plantations at the end of the period, as against an increase of 34 acres in the previous period.

There is nothing of any importance to be noted about the *bela* plantation. *Kikar* seed was sown in 140 acres in the Tilauri *rakh*, and *kikar* sowings failed in 180 acres in the *rakh* owing to river action; *kikar* seeds were sown in 7·49 acres on *bands*, but failed in 2·87 acres, owing to damage by trespassing cattle and scanty rainfall. The area under plantations in the district at the end of the period under report was as follows :—

	Acres.
1. Tilauri *rakh*	541
2. Mehrauli plantation	17
3. *Bands*	18·39
	576·39

Groves.—The subjoined statement shows the progress in groves :—

Period.	Area of Groves.			
	At beginning of period.	Added during the period.	Failed during the period.	Balance.
Delhi Municipality.	Acres.	Acres.	Acres.	Acres.
1890-91 to 1892-93	...	...	...	...
1893-94 to 1895-96	...	1·50	...	1·50
District.				
1890-91 to 1892-93	10·67	3·94	...	14·61
1893-94 to 1895-96	14·61	7·79	5·89	16·51

A grove of prickly pear, which has been planted by the Delhi Municipal Committee on the Ridge at Delhi, was shown in the returns during the period under report.

In the district there was a net increase of 1·90 acres. The increase is, however, really more than this, as the area that failed includes 5·57 acres on account of correction of errors in the area of groves in police rest-houses, stations and posts. The 7·79 acres added during the period include:—

		Acres.
1.	Transferred from nurseries	·22
2.	Groves in compounds of three schools and three dispensaries, shown for the first time	1·23
3.	Six new groves at Balabgarh, Alípur, Rái, and Larsauli encamping-grounds and Mundka and Serái Rohilla Khán cart-enclosures	6·34
		7·79

The grove of prickly pear (1·50 acres) on the Ridge, in the Delhi Municipality, is improving, and the young trees planted within the area enclosed by the fence are growing up well.

The 86 trees (*nim*, *shisham*, &c.,) planted in the Larsauli encamping-ground, and the 89 mango trees planted in the Rái encamping-ground, are in good condition, being 5 to 6 feet high.

50 trees (*nim* and *shisham*) have been planted in the Alípur encamping-ground, and 44 trees (*nim*, *shisham* and *kikar*) in the Mundka cart-enclosure. They are 2 to 3 feet high.

40 mango trees have been successfully planted in the Balabgarh encamping-ground.

One of the groves included in Statement No. IV is the Balabgarh garden. It is stocked with a number of fruit and timber trees (oranges, lemons, plums, tamarind, pomegranate, guava, *nim*, *shisham*, &c.). Its soil, however, is not favorable to the growth of mango trees. Its area is 1·40 acres, a part of which is devoted to the sowing of lucerne grass and the experimental cultivation of American corn seeds, *Sorghum saccharatum*, &c.

Avenues.—The following statement shows the progress made in avenues:—

Period.	Length of roads suitable for avenues.	Length of Avenues.			
		Stocked at beginning of period.	Added during period.	Failed during period.	Balance.
Delhi Municipality.	Miles.	Miles.	Miles.	Miles.	Miles.
1890-91 to 1892-93	38·00	...	25·00	...	25·00
1893-94 to 1895-96	38·00	25·00	...	...	25·00
District.					
1890-91 to 1892-93	333·12	76·30	173·91	98·62	151·59
1893-94 to 1895-96	337·67	151·59	46·94	47·30	151·23

No avenues were planted in the Delhi Municipality during the period under report. In the district the net result was a decrease of ·36 mile against an increase of 75·29 miles in the previous period. The percentage of failures in the period under report is 100 against 57 in the previous one. The operations carried out during the three years are as follows:—

	Planted or sown.	*Failures.*
1893-94	27·35 miles.	22·94 miles.
1894-95	16·32 „	13·10 „
1895-96	3·27 „	11·26 „
	46·94 „	47·30 „

The failures in 1893-94 and 1894-95 are attributed to bad soil and floods, and those in 1895-96 to scanty rainfall. These failures are principally in the *kíkar* sowings on unmetalled roads, made in the period under report, as well as in the previous period.

A number of new trees were planted in the suburban wards of the Delhi Municipality during the period under report, and are doing well. But no new avenues were planted.

The figures for the district given in Statement No. V include the figures for the Sonepat and Balabgarh Municipalities. No new work was done in the former, but the 2·31 miles of old avenues were maintained. ·17 mile was planted with 40 trees in the Balabgarh Municipality during 1895-96, which are in good condition.

The operations carried out in the district are shown in the following table :—

Name of Tahsil.	Length of roads planted or sown during the period.	Failures during the period.
	Miles.	Miles.
Delhi tahsíl	13·00	13·18
Sonepat tahsíl	19·85	19·25
Balabgarh tahsíl	18·92	14·87
Total ...	46·77	47·30

In the Delhi tahsíl the old existing avenues on the Delhi-Najafgarh road, covering 10·25 miles, were maintained and gaps filled up. 300 trees were planted on the Pul Khalási-Azádpur road, of which 150 failed. *Kíkar* seeds were sown on unmetalled roads in 1893-94 over 13 miles, but none in the two succeeding years, and 13·18 miles failed, owing to bad soil and scanty rainfall.

Out of a total length of 138·97 miles of twenty-four roads in this tahsíl, 74·56 miles were stocked with trees at the commencement of the period under report, which were reduced to 74·38 miles at the end of the period.

In the Sonepat tahsíl out of a total length of 87·04 miles of twelve roads, 33·06 miles were stocked with trees at the beginning of the period. 19·85 miles were planted or sown during the period, and 19·25 miles failed, leaving 33·66 miles at the close of the period. Of the old existing avenues on the Sonepat-Bahalgarh road, 4 miles were maintained. Gaps were filled up during the period, and the avenues are in good condition, the trees being about 18 feet high. The avenue was 4·90 miles long originally, but ·90 mile was destroyed, owing to bad soil and cutting of trees for crates.

The Sonepat-Murthal road had an avenue of 3·07 miles long at the beginning of the period, but it was reduced to 2·25 miles at the end, owing to flood water standing on the road for a long time. 75 trees were planted in the first year and 138 mango trees in the third year on this road.

70 mango plants were planted on the Sonepat-Jharaut road in 1895-96, and a *máli* was employed for their protection. They were reported to be doing well.

Kíkar seeds were sown in about 17 miles of unmetalled roads in this tahsíl during the period, but failed in about 15 miles owing to floods.

In the Balabgarh tahsíl *kíkar* seeds were sown in 11·50 miles, and these operations failed in 13·75 miles (including the work of the previous period), mainly owing to scanty rainfall. The tree planting operations were, however, attended with better results. 896 trees were planted in gaps in the existing avenues of the Badarpur-Mehrauli road (5·50 miles), out of which 582 trees were destroyed by want of rain and porcupines. The remaining 314 trees are growing well.

The avenues on the north and south branches, Faridabad road, (2·22 miles), are doing well. Nearly 400 mango trees, besides other fruit and timber trees, are growing on these roads. 75 trees were planted on the north and south branches, Balabgarh road, in 1895-96, out of which 25 failed for want of rain. Out of a total length of 109·18 miles of eighteen roads, 43·97 miles were stocked with trees at the beginning of the period, which were reduced to 43·02 miles at the end of the triennial period.

A *chaukidár* on Rs. 5 per mensem looks after the *kíkar* seed sowing operations on unmetalled roads.

Generally speaking, the result of *kíkar* seed sowing operations along the unmetalled roads, which increased the length of roads planted during the previous period, has not been at all satisfactory during the period under report.

Cattle-trespass and lopping.—Two new cattle-pounds were opened in the Delhi tahsíl, two in the Balabgarh tahsíl, and three new ones in the Sonepat tahsíl, in addition to the 11 previously existing pounds. But no information is given by the Local Boards in their reports as to the extent to which young trees were damaged by cattle, and how far the *chaukidárs*, &c., employed on the different roads, exerted themselves in preventing this damage.

Lopping was carried out on the following roads :—

Delhi tahsíl.

1. Kálapahár road ... ...
2. Delhi-Najafgarh road ... ... } In 1894-95, cost Rs. 26-12-0.
3. Pálam-Najafgarh „ ... ...
4. Nangloi-Najafgarh „ ... ...

Sonepat tahsíl.

1. Bahalgarh-Jhoondpur road.
2. Sonepat-Bahalgarh „
3. Sonepat-Murthal „

Balabgarh tahsíl.

1. Balabgarh-Chausa road ... ... } In 1893-94, cost Rs. 11-14-0.
2. Farídabad-Majhaoli „ ... ...

1. Farídabad-Majhaoli „ ... ... } In 1894-95, cost Rs. 3-1-0.
2. South branch, Farídabad road ... ...

1. Farídabad-Atáli road ... ...
2. „ Majhaoli road ... ...
3. „ Kirauli „ ... ...
4. Dyálpur-Mohna „ ... ... } In 1895-96, cost Rs. 35-7-0.
5. Chausa „ „ ... ...
6. Balabgarh-Chausa „ ... ...
7. Sikri „ „ ... ...

Fruit and fodder trees.—No special measures were taken for growing trees suitable for furnishing cattle fodder. The *kíkar*, *pípal*, *banyan*, &c., trees, the leaves of which are eaten by cattle, grow in large numbers on the district roads.

Mango trees are growing on the Pul Khalási-Azádpur road, yielding an annual income of Rs. 8 or Rs. 9 from sale of fruit. Plum trees on the Shádipur *band* yield an annua income of about Rs. 10. 238 mango trees are growing on the Sonepat-Murthal road, and 70 mango trees on the Sonepat-Jharant road. They have not yet borne fruit. Nearly 500 mango trees are growing on the north and south branches, Balabgarh and Farídabad roads, but they have not yet borne fruit. 56 date trees are growing in the Kutab staging bungalow garden and are from 3 to 6 feet high. 18 date trees are growing in police station compound, and six in the Queen's garden, being between 9 and 10 feet high.

Financial results.—The following statement shows the financial results :—

	1893-94.	1894-95.	1895-96.
Income.	Rs.	Rs.	Rs.
District Funds	1,682	2,060	2,200
Sonepat Municipality	16	45	28
Total	1,698	2,105	2,228
Expenditure.			
District Funds	4,470	3,808	3,108
Sonepat Municipality	92	98	106
Balabgarh do.	...	...	20
Provincial Services	61	33	206
Total	4,623	3,939	3,440

The decrease in the expenditure is partly due to reduction of certain unnecessary establishment. The figures for the Delhi Municipality require no comment.

Development of arboriculture by private persons.—The following operations are reported under this head by the Local Boards:—

Delhi tahsíl.

1. Trees planted in 2 *kacha biswás* in Poshangipur by Lekha of Poshangipur.

Sonepat tahsíl.

2. Garden planted by Mutsadi Lál, son of Jogi Dás, in which guavas, pomegranates, plantains, &c., have been planted, on Sonepat-Murthal road near Sonepat.

Balabgarh tahsíl.

3. Garden, area 1·6 acre, on north branch, Faridabad road, by Sheikh Abdul Ghani, Ráis of Faridabad, containing mangoes, lemons, oranges, peaches, and guavas.
4. Mango tope, area ·62 acre, at Chatarpur, by Kalwa and Píra.
5. Mango tope, area ·62 acre, at Chatarpur, by Roshan, son of Ashraf.
6. Mango tope, area 1·04 acre, at Chatarpur, by Amír, son of Sina.
7. Garden of pomegranates, &c., area 2·08 acres, at Uthakola, by Baldeo, Gujar.

A plan of operations for five years has been prepared.

Delhi Municipality.

The three Municipal gardens (the Queen's, the Kudsia, and the Roshnára) may be classed under the head of "ornamental gardens," and the Municipal *bela* plantation under head "plantations."

The income and expenditure of the three gardens and the *bela* plantation for the three years under report will be found detailed in the enclosed Statement A.

The apparently large income from the Roshnára garden during the two years 1894-95 and 1895-96 is due to the sale of old trees, cut down with the object of opening up the garden, which has been much improved during the past three years.

A *pacca* masonry wall has been built almost all round the Roshnára garden and the plots attached to it.

There is nothing of any importance to be noted about the *bela* plantation.

The income and expenditure on roadside trees will be found detailed in Statement B. A number of new trees were planted in the suburban wards during the three years under report, and are doing well.

JULLUNDUR DISTRICT.

Rainfall.—The rainfall of the years 1893-94 and 1894-95 was abundant and greatly above the average, while that of 1895-96 was scanty and much below the average.

There was no fall in September 1895, and the fall in August 1895 was slight. The winter rain was only 2·16 inches, as compared with 7·63 and 8·14 inches of the two preceding years, and 4·58, the average fall. In consequence of this scanty rainfall, the District Board had last year to entertain extra *bhistis* for watering the young trees.

Nurseries.—The area under nurseries at the commencement of the period under report was 15·66 acres, which was reduced by 6·70 acres during 1893-94 and 1894-95, in consequence of the transfer of certain plots to groves, under which head there is a corresponding increase. This was due to the trees in these nurseries having passed the stage at which they could be transplanted. There are now 12 nurseries in the district (2 in Jullundur, 2 in Nakodar, 5 in Phillour and 3 in the Nawashahr tahsíl), and they are sufficient for the present requirements of the district.

20,154 young trees were given to *zamíndárs* free of cost during the past three years, and 19,019 planted on roadsides.

Last year, under the Commissioner's instructions, *pípal*, *bohar* and *kíkar* seedlings were planted, and will be transplanted on roadsides, as soon as they are ready.

Plantations.—The area at the beginning of 1893-94 was 164·0 acres, while at the end of 1895-96 it stands at 81·43 acres, or a decrease of 82·57 acres. The reason for this decrease is that the trees of three plantations, aggregating an area of 37·57 acres, were cut down and sold, as they were in danger of being washed away by the River Sutlej, and 45·0 acres of land have also been leased out for cultivation, as the trees had been cut down in previous years. All these plantations are on the banks of the Sutlej, on lowlying ground, and are liable to inundation. *Shísham* and *kíkar* are generally sown in these plantations.

Groves.—These are generally disused nurseries, or parts of nurseries, the trees of which have grown too large for transplantation. The number at the beginning of the period under report was 5, with an area of 5·31 acres ; 8 were added with an area of 6·70 acres, while one at Adampur, with an area of 1·25 acres, was made over to Government. As the grove was on the encamping-ground, the trees were cut down last year, and the land was let out for cultivation along with the encamping-ground.

The area at the end of 1895-96 stands at 10·76 acres, and the number of groves at 12.

Avenues.—The work was chiefly confined to filling up gaps on old lines of road; very little new work was undertaken, except on 3·25 miles of the road from Adampur to Kartárpur *viâ* Aláwalpur. This road is 13 miles long ; 9·75 miles were planted in previous years and 3·25 during 1893-95, thus completing this road. The District Board has a gang of 10 *coolies* and a *jamadár* for each of the four tahsíls ; and as there are some 225 miles of roads planted with trees to look after, this establishment is unable to take up new lines of road, and the Board is too badly off at present to spend more money on tree planting. During the last triennial period 19,019 trees were planted on roads by the District and Municipal Committees, of which 3,009 have died, or about 16 per cent.

Gardens.—There is only one ornamental garden in the district, at the head-quarters, called the Empress, or Town Hall, Garden. It covers an area of little more than 11 acres, and is maintained jointly by the Municipal and District Boards. A part is laid out with grass, the remainder planted with fruit trees, such as Malta and country oranges and grafted mangoes, and vegetables are also sown. Its income and expenditure will be discussed under another head.

There are four other small gardens in the district as follows :—

(1). The Naráin Garden, Jullundur. This is a small garden in the tahsíl compound, and is also maintained jointly by the District and Municipal Committees.

(2). The Nawashahr Báradari Garden. This is an old *nazúl* garden near the tahsíl building, and is kept up by the District Board.

(3). Phillour Municipal Committee Garden. This is a small garden at the Committee house, and is maintained by the Municipal Committee. It is on lease.

(4). Nakodar Municipal Garden. This is a long strip of land on the side of the Malsián road, planted with a few fruit trees.

Cattle trespass and lopping.—Earthen *gamlás*, or cactus hedges, are provided for the protection of young trees, and gangs of *coolies* are employed in each tahsíl for the purpose of looking after the trees, planting and watering them ; cattle found injuring trees, or grazing on the roadside grass, are impounded, and occasionally suits for damages are also instituted. During the period under report 2,369 cattle were impounded and 18 suits instituted ; nevertheless damage is constantly done by shepherds and villagers.

Lopping is done every year in the cold weather. Rs. 566 were realized during the past three years after paying the expenses of extra *coolies*.

Financial results.—The following statement shows the income and expenditure during the past three years under different heads :—

Head.	Income.				Expenditure.				Surplus.	Deficit.
	1893-94.	1894-95.	1895-96.	Total.	1893-94.	1894-95.	1895-96.	Total.		
Gardens.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Jullundur Town Hall	450	427	362	1,239	1,839	1,340	1,480	4,659	...	3,420
Naráin	36	38	54	128	350	320	396	1,066	...	938
Nawashahr Báradari	293	236	248	777	250	316	296	862	...	85
Phillour Municipal	30	30	30	90	...	...	...	...	90	...
Nakodar do. ...	74	8	8	90	61	49	48	158	...	68
Total Gardens ...	883	739	702	2,324	2,500	2,025	2,220	6,745	...	4,421
Nurseries	898	334	474	1,706	1,083	1,281	1,169	3,533	...	1,827
Plantations... ...	135	616	4,218	4,969	..	80	60	140	4,829	...
Groves and Avenues	8,606	4,522	4,929	18,057	4,056	3,687	3,848	11,591	6,466	...
Miscellaneous ..	168	138	72	373	...	...	...	...	373	...
Total ...	10,685	6,349	10,395	27,429	7,689	7,073	7,297	22,009	5,420	...

Gardens:—*Jullundur Town Hall.*—The income during 1895-96 was less than that of the two previous years, and this is due to less income from sale of grass and vegetables, on account of scarcity of rain. The larger expenditure in 1893-94 is due to an outlay of Rs. 230 on repairs to garden buildings, while in 1894-95 no repairs were done, and, moreover, the establishment was reduced by Rs. 8 per mensem. In 1895-96 Rs. 212 were spent on repairs to buildings. The garden was at one time, I am told, in excellent order, but a *máli* was in charge for several years up to last October, who allowed it to go to ruin. The garden is now under better management. I do not think it can ever be expected to pay, as it is mainly an ornamental garden; but, at the same time, I think that better management should lead to an increase in the receipts. Fruit trees should be planted in spare plots, as these require very little care, and bring in a good income. Some money might also be made by letting out, or selling, good palms and plants in pots. It is a waste of money to grow vegetables, which do not sell for what they cost to cultivate.

Naráin Garden.—This is a useless garden, which has cost Rs. 938 in the past three years, and has only brought in Rs. 128. I see no way of improving the receipts, and as the garden serves no special purpose, except to embellish the tahsíl precincts, the establishment should be reduced.

Nawashahr Báradari.—The larger income in 1893-94, as compared with 1894-95 and 1895-96, is on account of the credit in that year of an item of Rs. 46, sale-proceeds of old trees, while the increase in expenditure during 1894-95 and 1895-96, compared with 1893-94, is on account of special repairs to buildings and the well, amounting to Rs. 66 in 1894-95, and to the purchase of a pair of bullocks for Rs. 60 in 1895-96. The garden almost pays its own way.

Phillour Garden.—This is on lease, and there is no expenditure on it, the net income being Rs. 30 per annum.

Nakodar Garden.—The larger income in 1893-94, compared with the two following years, is on account of the sale of bullocks for Rs. 43-8, and the realization of Rs. 25-8, arrears of the previous year. The expenditure, Rs. 48, is on account of pay of a *máli* at Rs. 4 per mensem. I think some better arrangement might perhaps be made for this garden. I shall also see what can be done with regard to the Naráin garden. I have already given a great deal of attention to the Empress garden.

The total income of the gardens during the past three years was Rs. 2,324, and the expenditure Rs. 6,745, or a deficit of Rs. 4,421.

Nurseries.—The income shown is chiefly from sale of vegetables and fruit from the Jullundur nursery, which is 11·3 acres in area, 2·2 acres being under nursery, and the remainder planted with fruit trees and sown with vegetables.

As I have noted above, it is a very bad and useless policy to grow vegetables, as they are only grown at a serious loss. I have now leased out most of the nursery garden, only retaining a small but sufficient area for the nursery, and my estimate shows that the nursery garden, as a whole, will pay its own way in future. This will be a considerable saving to the District Board. The larger income, *viz.*, Rs. 898, in 1893-94, shown in the above table under nurseries, as compared with the two following years, is due to the credit of Rs. 626 on account of the sale of the land of the two nurseries at Mahatpur and Malsián. There is not much variation in expenditure.

Plantations.—The very large increase in income during 1895-96, as compared with the two previous years, is on account of the sale of the trees of the plantation at Punian for Rs. 4,510, of which Rs. 4,130 were realized during the year.

Groves and Avenues.—The larger income during 1893-94, as compared with the two following years, is due to an extraordinary item of income, amounting to Rs. 2,307, from sale of trees blown down by storms in that year.

There is not much variation in expenditure. The establishment for roadside arboriculture consists of—

1 Jamadár on Rs. 15 per mensem;

3 Jamadárs on Rs. 8 each = Rs. 24 per mensem;

40 Coolies on Rs. 5 each = Rs. 200;

or a monthly expenditure of Rs. 239, and a yearly expenditure of Rs. 2,868.

The total income under all heads of arboriculture during the past three years was Rs. 27,429, and the expenditure Rs 22,009, showing a surplus of Rs. 5,420, or Rs. 1,807 per annum.

Work done by private agency.—The people of this district, on the whole, have very few gardens, as the cultivation of land is more profitable, but some rich *sáhukárs* and *zamíndárs* have gardens. At Jullundur and Nawashahr there are more gardens than in any other part of the district, and round about the former town there are 12 private groves of *shisham* trees, as detailed below. These are all on barren, sandy soil, which is almost unfit for cultivation, and it is consequently profitable to plant *shísham*, which grows very well on this kind of soil.

Locality.	Name of owner.	Area.
		Acres.
On Kapurthala road at Basti Babakhel ...	Abdullah Khan	4·75
Ditto ditto ...	Ditto	8·40
Grand Trunk Road to Kartárpur	Mián Fazal Karim Khan, Vice-President, Municipal Committee.	2·62
Ditto	Ditto ditto ditto ...	0·80
Ditto	Kallu and others, Majawars	0·92
Basti Sheikh road	Ata Muhammad	1·41
Nakodar Road	Bahádar Ali	1·77
Ditto	Ditto	1·28
Ditto	Ditto	4·19
Ditto	Ahmad Bakhsh	0·66
Ditto	Malkans	0·53
Road to cantonments	Kanwar Suchet Singh	12·90

Cultivation of fruit trees.—The principal fruit tree in this district is the mango, as the soil of Jullundur is very favourable to its culture. Mulberry, *jáman*, oranges, figs, *bér* (plum) are also grown.

LUDHIANA DISTRICT.

Rainfall.—The fluctuations of rainfall have been very marked during the period under report. In 1893-94 it was 29·2 inches, or very near the average of the past years, *viz.*, 26·6 inches. In 1894-95 it was rather excessive, as it went up to 38·54 inches, but the year 1895-96 was one of scanty rainfall.

Nurseries.—The area under nurseries has been steadily falling. From 5·41 acres, at the beginning of 1893-94, it was reduced to 3·71 at the end of 1894-95, while at the end of 1895-96 it has sunk to 1·95. There is only one nursery now at Mansuran, all the others having been exhausted, as during the last two years 20 miles of road have been planted with single lines of trees, which are thriving well. Efforts will now be made to have more nurseries planted at suitable places in the district, as there are still about 30 miles of road which require planting with trees. Young fruit trees were sold last year for Rs. 30, but none were given *gratis*.

Plantations.—There are no plantations, properly so called, in the district. It was remarked in the report for the last triennial period, that under the new scheme the grove known as the Ludhiána *rakh* will be partially treated as a plantation, but not wholly so. Nothing, however, has as yet been done in that respect. The *rakh* was originally a nursery for *shísham* trees; although many trees were transplanted to form roadside avenues, still a very large number were left to grow *in situ*, and have, therefore, according to the classification adopted, been returned as groves.

Groves.—The area under groves at the beginning of the period under report was 352·59 acres as per detail below—

Ludhiána *rakh*	178·62 acres.
Groves on Kálka road	173·97 „

One acre was added to the area under groves during 1894-95 on the Samrála-Ludhiána road. The addition of 108·06 acres to groves during 1895-96 does not represent any areas actually planted with trees during the period under review. The fact is that in the previous report the topes of trees on encamping-grounds, and groups round saráis, Thánás, Police rest-houses, &c., were not included under this description at all; but particular care has been taken this year to have all of them included now. The area under groves at the end of the triennial period under report is 461·65 acres. The Bhattián grove, which is 197 acres in area, is under the control of the Forest Department.

Avenues.—In 1893-94-1·12 miles of road were planted with single lines of trees on either side in the Samrála tahsíl. The total number of young trees thus put out was 613. 1,837 young trees were also planted in place of dried ones and to fill up gaps. In 1894-95 10·25 miles of road were planted as follows :—

		miles.
Ludhiána-Lalton	road	4
Kohára-Sanchwál	„	3
Dehlon-Pakhowál	„	1
Sidhwan-Jagráon	„	½
Samrála-Behlolpur	„	1¼

and altogether 4,075 trees were put in.

In 1895-96 9·75 miles more of road have been planted on either side as follows :—

		Miles.
Ludhiána-Lalton	road	4
Jagráon-Ráikot	„	3
Kheri-Samrála	„	1
Samrála-Behlolpur	„	1
Khanna-Kheri	„	¾

The total number of trees thus planted last year was 2,833, while 2,095 were planted to fill up existing gaps.

The trees so planted are mostly *shísham*, but during the past two years experiments have been made with mangoes ; also experience has shown that the land about Samrála is well fitted for mangoes. Accordingly, over 200 young trees were planted in 1894-95 on the Samrála-Behlolpur road, while in 1895-96 about 300 have been planted on the Samrála-Kheri, and about as many on the Khanna-Kheri, road.

All, except half-a-dozen trees which have died, are doing well.

No attempt worth the name has yet been made to plant *kikar*, but this tree grows plentifully in this district, and is of spontaneous growth, and attains to very large proportions. The wood is very serviceable to the *zamíndárs*. Under instructions from the Commissioner of Jullundur, efforts are being made to plant the remaining lengths of roads with *kikar* seed during the rains, merely by ploughing. It has not been considered necessary to sow the seed in nurseries in the first instance, and then to transplant the young trees.

It remains to notice that, in the return submitted for the year 1894-95, 149·61 miles were shown as the length of roads fully stocked with trees. This was wrong, the correct figures being 121·5. The necessary correction has been made in Return No V, annexed to this report, as directed in footnote (c).

The lengths herein shown are those of *kacha* roads only, which are under the charge of the District Board, but there are besides 66½ miles of *pakka* road, which is under the charge of the Public Works Department.

Gardens.—There is no ornamental garden, properly so called, in the district. But a portion of the *rakh* is used as a flower garden. There has been no income from this source.

There are, besides, the following fruit gardens in the district :—

Station garden, Ludhiána.
Bassián rest-house garden.
Jagráon tahsíl garden.
Samrála ditto

Income.—The income from these gardens has risen from Rs. 250 in 1893-94 to Rs. 1,584 in 1895-96, and there is every prospect of the income from this source increasing still further. No doubt the Bassián garden has been transferred from the District Board to the Canal Department, and so some loss will be occasioned thereby, but it is hoped that this loss will be more than balanced by the improvements which have been effected in the Jagráon and Samrála tahsíl gardens, especially in the former, which has just begun to yield valuable mango fruits.

The income under the head nurseries, shown for the years 1893-94 and 1894-95, is from the sale of loppings and fellings from the *rakh* and the gardens mentioned above, but this was wrong, and so this year, 1895-96, this column has been kept blank, and the income so derived has been credited to its proper head. The income from groves and avenues was very large in 1895-96, *viz.*, Rs. 17,208. This is due to the fact that in that year great attention was paid towards the removal of dry and useless trees on the *pakka* roads ; although they have been transferred to Public Works Department, the income from the trees standing on them is credited to the District Board.

Besides, the introduction of the Siálkot rules of sale of roadside trees has helped a great deal to control the income from this source.

The cause of the decrease of income under this head in 1894-95 is, that no income was derived in that year from sale of trees on roads which were made over to the Public Works Department, while in 1895-96 Rs. 8,677 were received from Public Works Department for sale of trees on the Ludhiána-Samrála road.

Expenditure.—The following gives details of arboricultural establishment for the whole district for each year under report:—

For 1893-94.

2 Jamadárs	@	Rs. 10 and 8	= Rs. 18	per mensem		
4 Málís	@	„ 6	= „ 24	„	„	
7 „	@	„ 5	= „ 35	„	„	
55 Bhistís	@	„ 4	= „ 220	„	„	
1 pair of bullocks	@	„ 12	= „ 12	„	„	

For 1894-95.

2 Jamadárs	@	Rs. 10 and 8	= Rs. 18	per mensem.		
3 Málís	@	„ 6	= „ 18	„	„	From 1st April to 15th July 1894.
6 „	@	„ 5	= „ 30	„	„	
52 Bhistís	@	„ 4	= „ 208	„	„	
1 pair of bullocks	@	„ 12	= „ 12	„	„	
3 Málís	@	„ 6	= „ 18	„	„	From 16th July 1894 to 14th January 1895.
6 „	@	„ 5	= „ 30	„	„	
49 Bhistís	@	„ 4	= „ 196	„	„	
2 Málís	@	„ 6	= „ 12	„	„	From 15th January to 31st March 1895.
5 „	@	„ 5	= „ 25	„	„	
1 Máli	@	„ 4	= „ 4	„	„	
44 Bhistís	@	„ 4	= „ 176	„	„	

For 1895-96.

2 Málís	@	Rs. 6	= Rs. 12	per mensem.		From 1st April to 30th June 1895.
5 „	@	„ 5	= „ 25	„	„	
1 Máli	@	„ 4	= „ 4	„	„	
44 Bhistís	@	„ 4	= „ 176	„	„	
2 Málís	@	„ 6	= „ 12	„	„	From July to October 1895.
5 „	@	„ 5	= „ 25	„	„	
1 Máli	@	„ 4	= „ 4	„	„	
48 Bhistís	@	„ 4	= „ 192	„	„	
1 Máli	@	„ 7	= „ 7	„	„	From November 1895 to 31st March 1896.
1 „	@	„ 6	= „ 6	„	„	
6 Málís	@	„ 5	= „ 30	„	„	
48 Bhistís	@	„ 4	= „ 192	„	„	

The following table shows the establishment on the various gardens for the three years under report:—

For 1893-94 *and* 1894-95.

Fruit garden at Sadr—

4 Beldárs	@	Rs. 5	= Rs. 20	per mensem.

For 1895-96.

1 Máli	@	Rs. 15	= Rs. 15	per mensem.		
4 Beldárs	@	„ 5	= „ 20	„	„	

For 1893-94 *and* 1894-95.

Nursery at Sadr—

1 Máli	@	Rs. 15	= Rs. 15	per mensem.		
1 „	@	„ 7	= „ 7	„	„	
5 Beldárs	@	„ 5	= „ 25	„	„	
1 Beldár	@	„ 4	= „ 4	„	„	

For 1895-96.

Only one nursery exists at Mansurau for which no establishment is entertained

For 1893-94 *and* 1894-95.

Flower garden at Sadr—

1 Máli	@	Rs. 15	= Rs. 15	per mensem.		
2 Beldárs	@	„ 5	= „ 10	„	„	
1 Beldár	@	„ 4	= „ 4	„	„	

For 1895-96.

1 Máli	@	Rs. 15	=	Rs. 15	per mensem.	From April to October 1895.
2 Beldárs	@	„ 5	=	„ 10	„ „	
1 Beldár	@	„ 4	=	„ 4	„ „	
1 Máli	@	„ 15	=	„ 15	„ „	From November 1895 to 31st March 1896.
3 Beldárs	@	„ 5	=	„ 15	„ „	
1 Beldár	@	„ 4	=	„ 4	„ „	

For 1893-94, 1894-95 *and* 1895-96.

1 Forester @ Rs. 7 and 10 per mensem.

Tahsíl garden at Jagraon—

1 Máli	@	Rs. 6	=	Rs. 6	per mensem.
2 Beldárs	@	„ 5	=	„ 10	„ „

Bassian garden—

1 Máli	@	Rs. 10	=	Rs. 10	„ „
1 Chankidár	@	„ 5	=	„ 5	„ „
5 Beldárs	@	„ 4	=	„ 20	„ „

For 1893-94 *and* 1894-95.

Tahsíl garden at Samrála—

1 Máli	@	Rs. 7	=	Rs. 7	per mensem.
5 Beldárs	@	„ 4	=	„ 20	„ „

For 1895-96.

1 Máli	@	Rs. 7	=	Rs. 7	per mensem.	From April to August 1895.
5 Beldárs	@	„ 4	=	„ 20	„ „	
1 Máli	@	„ 7	=	„ 7	„ „	From September 1895 to March 1896.
4 Beldárs	@	„ 4	=	„ 16	„ „	

RAWALPINDI DISTRICT.

Rainfall.—It will be seen from Statement No. I that, of the three years under report, the year 1893-94 shows by far the heaviest rainfall, while the past year was a conspicuously dry one.

The average for the three years is 39·67.

Nurseries.—The area set apart for nurseries is 21·76 acres, of which 14·21 acres were stocked by the District Board, and 1·68 acres by Municipalities.

Groves.—The area set apart for groves in this district is 395·58 acres, of which 359·95 acres were stocked by the District Board, and 20·21 acres by Municipalities.

Avenues.—There are 967·97 miles of roads suitable for avenues, of which 325·33 miles have been stocked by the District Board, and 10·45 miles by Municipalities.

Income.—The total income from all sources during the three years was :—

	Rs.
District Board	13,155
Municipalities	6,033
Total	19,188

The District Board income shows an improvement of Rs. 3,520 on the previous three years' figures, due principally to careful management of the park and the gardens at Hasan Abdál and Chattar.

The income of Municipalities also shows an increase of some Rs. 1,900, the whole of which nearly is claimed by the Ráwalpindi Municipality :—

	Rs.
From trees	1,100
„ garden	800

Expenditure.—The total expenditure for the period under report was :—

	Rs.
District Board	5,299
Municipalities	9,492
Total	14,791

Both of the above totals show an appreciable reduction on the figures of the previous three years, due mainly to reduction in unnecessary establishment and closer supervision.

Gardens.—The six public gardens at Ráwalpindi, Chattar, Hasan Abdál, Fatehjang, Pindigheb and Gujar Khan continue to be maintained for the propagation of fruit trees and flowers, and large supplies of young fruit and flower trees are annually distributed from nurseries to *zamíndárs* and others in the district. In addition to the Government nurseries at Chattar and Hasan Abdál, the Board maintains a nursery at Cherra-pani (Lambli), 10 miles from Murree, from which young fruit and flower trees are liberally distributed *gratis*. This nursery has lately been increased by the acquisition of some 3 acres of land, and has been partly laid out as an orchard, from which good results are expected to follow in the course of another three or four years.

General remarks.—I am unable to report any progress in arboricultural work for the period under report, as the weather has, as a rule, been quite detrimental to any attempt at extensive tree-planting, especially during the whole of last year and the early part of this year, but while operations have not been extended, it will be observed that income has increased and expenditure fallen.

GUJRAT DISTRICT.

Rainfall.—The total rainfall of the period under report was less than that of the past by 15 inches. The years 1893-94 and 1894-95 were favorable to arboriculture operations, while the year 1895-96 was not so, owing to scanty rainfall. The heavy rains of 1893 and the storms of 1894 caused much injury to existing avenues.

Nurseries.—The area under nurseries at the end of the past three years was 3·051 acres. To this area 2·984 acres were added in the triennial period under report; while 3·8205 acres were given up, owing to a large number of trees having been planted on roadsides. Special attention was paid to the formation of nurseries near roads, which are maintained by small payments to *zamíndárs*. A large nursery is maintained at the sadr station on District Board land, and is well looked after. It is well stocked with *shísham* trees, which are taken from it for transplantation on roads.

Plantations.—The area planted during the years under report was in excess of that of the past by 0·49 acres.

Groves.—The total area under groves at the end of the year 1895-96 was 176·82 acres. No statement of groves was forwarded with the last triennial report.

Avenues.—Steady progress has been made in tree planting during the triennial period under report. The principal work has been the extension and maintenance of avenues of trees. The subjoined statement shows the length of roads planted with trees in each year:—

Year.	Length of roads planted during the year.	Length of roads which failed during the year.	Number of trees planted.
	Miles.	Miles.	
1893-94	10·60	2	5,040
1894-95	13·81	3	6,414
1895-96	16·99	5	7,402
Total	41·4	10	18,856

In column 6 of the statement of avenues is also included the area on which trees were sold.

Income.—The income from the ornamental gardens maintained by the District Board shows a decrease of Rs. 275 as compared with the past. The decrease is attributed to injury caused by storms and drought.

A much larger income was realized from the sale-proceeds of roadside trees. The increase amounted to Rs. 6,309, and is due to the fact that a large number of trees were blown down by storms, and Rs. 1,750 on account of arrears of previous years were realized during the years under report. There was also an increase of Rs. 255 under the head Miscellaneous, owing to the sale of grass on roads.

Expenditure.—The expenditure on gardens show a decrease of Rs. 318, as compared with the past, which does not call for any remark.

The expenditure on avenues, incurred by the District Board during the years under report, show an increase of Rs. 3,235 as compared with the past. The extra expenditure was necessary, as owing to extension of avenues, a larger establishment was employed to plant and water trees. The establishment was kept up both for the maintenance of existing avenues as well as their extension. Hence it has not been possible to divide the cost between columns 9 and 10 of the statement.

Development of arboriculture by private persons.—No private persons, or village communities, interested themselves in arboriculture or planted trees.

Cultivation of fruit trees.—I had a few mango and orange trees planted in the District Board garden at Gujrát, and, if the experiment succeeds, it will be tried in future years.

GURDASPUR DISTRICT.

Rainfall.—The rainfall registered during the triennial period under report was 166·92 inches, against 111 inches shown in the previous report. The rainfall in the first two years was copious, but the third year was abnormally dry. On the whole, the rainfall was favorable, the average rate being about 55·64 inches a year.

Nurseries.—There are altogether nine nurseries in the district, *viz.* :—

1. Government garden, Gurdáspur.
2. Encamping-ground, do.
3. Sessions House, do.
4. Tahsíl garden, Pathánkot.
5. Do. Batála.
6. Do. Shakargarh.
7. Bidhipur encamping-ground on the Gurdáspur Batála road.
8. Paniár on the Dinánagar road.
9. Jaura on the Kalánaur road.

Of these, No. 2 is the largest of all, and supplies the greatest number of trees for roadside plantations.

The area under nurseries is about the same as reported in previous years, *i.e.*, about 3·22 acres.

The total expenditure on these nurseries during the three years under report was Rs. 1,163, and the income from the same was Rs. 118. The income is chiefly derived from the sale of fruit trees to private persons from the nurseries at the Gurdáspur encamping-ground and the Government garden.

Plantations.—The area under plantations was about 25·65 acres against 25·55 acres shown in the previous report.

Groves.—The area under groves has risen from 4·887 acres to 8·157 acres during the period under report. No plots are specially reserved for groves, but the small area shown in Statement No. IV is land under overgrown plants, too large for transplanting.

Avenues.—Of 605·39 miles, the total length of roads suitable for avenues, 466 miles have been fully stocked with trees, and arrangements are in progress to stock the remaining length as soon as possible.

Fruit trees.—The following plants were received from the Simla gardens during the three years under report :—

Apple trees	525
Pear „	200
Plum „	10
Peach „ (American)	50

These plants were distributed as follows and are thriving :—

Pathánkot tahsíl garden	Apple trees	22
	Pear „	13
Dunera dák bungalow	Apple „	53
	Pear „	12
Dalhousie	Apple „	260
	Pear „	75
Bakloh	Apple „	110
	Pear „	10
Gurdáspur garden	Apple „	50
	Pear „	80
	Plum „	10
	Peach „	50
Batála	Pear „	10
Private gardens, Gurdáspur	Apple „	30

AMBALA DISTRICT.

Rainfall.—The rainfall in the years 1893-94 and 1894-95 was higher, and that in 1895-96 was a little lower than the average rainfall of the past three years.

Nurseries.—The total area under nurseries at the end of 1892-93 was 23·94 acres 21·97 acres were given up in 1894-95, and 0·05 acres failed, and 0·15 acres were brought under nurseries in 1895-96. The total area under nurseries at the end of 1895-96 was 2·07 acres only. The decrease under this head appears striking, but what were classed as nurseries before 1892-93 existed more on paper than in fact. They were areas capable of being made nurseries under proper management, but did not deserve the name of nurseries, given to them by the then Secretary of the Local Fund, who was in immediate charge of the Arboricultural Department. These areas were struck off the office list in 1893-94, as per return then submitted.

Groves.—At the beginning of 1893-94 an area of 112·90 acres was shown under "groves," 69·03 acres were struck out of the returns in 1894-95, and 24·93 acres in 1895-96. The total area under groves shown at the close of 1895-96 is 18·94 acres. The decrease here is nominal, and merely due to more accurate classification and a truer interpretation of the term "groves." Before 1893-94 many areas were classed as "groves," which should have been omitted from the returns. The returns were revised in 1894-95 and 1895-96. Formerly the Secretary, Local Fund, through an assistant, had compiled the returns, and his figures were taken for granted. The figures were revised after check through the tahsils.

Avenues.—This statement shows 196·28 miles as the length of roads now fully stocked with trees, whereas the figure shown at the end of the last triennial period was 323·99. The decrease is 128 miles, which is remarkable. It is due mainly to—

(1) transfer of roads to Public Works Department;
(2) mistakes in calculating the length of the roads in the district.

A length of 34 miles of road was transferred to the Public Works Department. This has been shown in column 5 as a deduction.

A length of 12·80 miles of road was shown twice over in the last triennial returns. This has been deducted from column 5.

The Ambála-Náhan road was formerly shown as 30 miles long, no allowance being made for the portion which runs through foreign territory. Deduction has now been made in column 5.

The Ambála-Rupar road was shown as 40·57 miles long most carelessly, as a very large portion of this road runs through Patiála territory. This length has now been deducted, see column 5. A deduction of some 50 miles is accounted for by the above items, and the balance of 48 miles is to be accounted for by failures and delusive representations, made at the close of the last triennial period, when the returns were not submitted to the check they have subsequently received. The figure of 196·28 has been arrived at after reference to the tahsíldars.

The number of trees alive at the beginning of 1893-94 was 81,799; 17,136 trees are said to have been planted in the period under report, and 42,066 were felled and sold, or failed, or were transferred to the charge of the Public Works Department. The total number of trees remaining at the end of 1895-96 is shown as 56,849 only. The above figures are given for what they are worth. They have been calculated in the office. Personally I consider them pure guess work, and I would ask whether the Forest Department seriously believes that trees are carefully counted in any district, and whether it would wish Deputy Commissioners to have them counted. It would be necessary to open registers and have them checked year by year, but it is daily becoming a question whether tahsíl officials can even pretend to pay serious attention to the accumulated demands of different departments.

Income.—The income under the different minor heads during the three years under report was as follows:—

Year.	Ornamental gardens.	Nurseries.	Avenues.	Total.
1893-94	454	...	6,066	6,520
1894-95	659	...	3,378	4,037
1895-96	549	...	3,521	4,070

Rupees 659 shown under gardens against 1894-95 include Rs. 100 on account of outstanding receipts for 1893-94, which were realized in 1894-95, otherwise receipts from gardens during the three years were almost the same. Rs. 6,066, shown under avenues against the year 1893-94, include about Rs. 3,000 on account of large sales of roadside trees which took place in 1891-92 and 1892-93.

Expenditure.—The expenditure on arboriculture during the last three years under report, as compared with an income of Rs. 14,527, amounted to Rs. 20,411 as detailed below :—

Year.	Ornamental gardens.	Nurseries.	Avenues.	Total.
1893-94	3,646	...	4,728	8,374
1894-95	3,544	...	3,860	7,404
1895-96	1,897	...	2,700	4,633

The expenditure on arboriculture was considered too high in 1893-94 and 1894-95. It has now been cut down a good deal.

There are only two gardens in the district. One is the station garden at Ambála, which is an ornamental and vegetable garden in the civil station, and the other is one started at Morni in 1890 for experiments with tea and fruit trees. A separate reference has been made to you, suggesting that the District Board may be relieved of the responsibility of attending to and maintaining this garden by making it over to the Forest Department, to which Department alone it can be of actual interest. It is a dead loss to the District Board.

Miscellaneous.—There has been no particular calamity during the period under report affecting arboriculture, and there are no special features to comment on.

SIALKOT DISTRICT.

The failure of nurseries is a very serious matter, requiring immediate attention, as their proper maintenance at suitable spots is the first condition of successful arboriculture.

The extension of roadside avenues by 62·25 miles is very satisfactory, and compares favorably with 30 miles, extension in the last triennial period.

I will, in consultation with the Secretary, District Board, endeavour to devise more stringent measures for the protection of roadside trees from the ravages of goat herds, but the subject is a very difficult one, and prosecutions, as pointed out by the Secretary, District Board, are generally unsuccessful.

I shall watch with much interest the success of the experiment of appointing Superintendents of Arboriculture. It is proposed to allow them a small percentage of all profits, exceeding the average income on the last three years, in addition to their pay, and this will probably stimulate their exertions.

At the same time we have secured a better paid, and more reliable and responsible agency for conducting the annual sales.

Rainfall.—The rainfall during 1893-94 was abundant and seasonable; during the following year it was average, but 1895-96 was an unfavorable year for arboriculture, both the summer and winter rains being much below the average, and there was a break of 7 months from August 1895, during which time it was found very difficult to keep young trees alive.

Nurseries.—During the period under report some of the smaller nurseries on roads, which are fully stocked with trees, were abandoned, and the area has been reduced from 8·02 in 1893-94 to 6·79 acres. A good deal of tree planting has been done, and the nurseries are pretty well exhausted. The attention of the Tahsíldárs and Superintendents of Arboriculture has been called to the great importance of maintaining nurseries, and it is hoped that not only will the old nurseries be restocked, but that new ones will be established on roads that are to be planted in the ensuing year. Owing to the failure of some of the nurseries in past years, a large number of plants had to be obtained from *zamíndárs'* fields, or purchased from private gardens and nurseries.

Plantations.—During the year 1895-96 about 2 acres of reclaimed land on the banks of the Aik *nadi*, near the town of Siálkot, were planted with *shísham* by the Siálkot Municipality. They are in a promising condition.

Groves.—The area under groves has increased from 13·15 acres in 1892-93 to 14·67 acres by the transfer of the Nakhnal and part of the Dhoda nursery.

Avenues on roadsides.—During the past three years a good deal has been done in the extension of avenues. The net increase in the length of avenues successfully planted being 62·25 miles. Out of a total length, 838½ miles, of roads and canals suitable for avenues, no less than 541·74 miles are now fully stocked with trees. Besides this, several miles of inner lines of trees have been planted on various roads, this work has been shown on the map by means of red dots along the green lines. In some of the old avenue many gaps have also been filled up.

District canals and bands.—The avenues of fruit-bearing and fodder trees, planted on *bands* and embankments of irrigation channels in past years, are flourishing, and attention continues to be given to the filling up of gaps.

Species of trees planted.—The species of trees planted on roadsides are chiefly *sissu*, *sirís*, mulberry and *babúl* with a few mango, *tún*, and *Cassia fistula* here and there. The further planting of *sirís*, *bér*, and *bakáin* has been discontinued, and the planting of *sissu*, *Albizzia procera*, *Bauhinia*, mango, *jáman* and *kíkar* is being encouraged. The *bakáin* is unsuitable for avenues, as it not only gives little shade, but is short lived, whilst the *sirís* and *bér* are lopped and disfigured by goat herds. The most valuable timber-trees are the *sissu* and *kíkar*; the latter is easily grown, is specially useful for firewood and for all agricultural purposes, and fetches its full value at sales.

Experimental cultivation—American vine.—Cuttings were received from Simla a few years ago: most of them struck and were planted out a year after. During the past two years they have borne fruit, of a dark purple colour, about the size of a small round plum; the flesh is firm, juicy and well-flavored, though the bunches are small; but the plants are young and the fruit will doubtless improve.

Inga dulcis.—Some seed of this plant was received from the Director of Land Records and Agriculture, and sown two years ago in the District Fund garden to form a hedge. The seed germinated, but several plants died; those that survived have grown well.

Egyptian date.—A large number of plants were reared in the District Fund garden from seed received through the Director of Land Records in 1889-90. Several hundreds have been distributed over the district, and most of them are said to be doing well, especially those planted on the Arki canal and along the Satráh *band*. About 100 trees were planted in the Cantonment gardens and on the plateau of the fort in the city in 1890. Some of these are bearing fine large fruit now, to the great astonishment of the people, who have a saying that "the father plants the date for his grandson to enjoy the fruit." There are still several hundreds of seedlings ready for transplanting, which will be sent out shortly in consultation with the Local Boards.

Destruction of trees by storms, floods, &c.—During the past three years there has been no unusual damage to trees by storms or floods, but a great deal of injury has been done by goat herds. On every road *sirís*, mulberry, *bér* and *kíkar* trees, young and old, have been lopped, even up to 20 feet, for the purpose of feeding goats. Nearly every village has its flock of goats, especially those in the neighbourhood of cities and cantonments. The amount of damage that these people do to roadside trees is deplorable. They collect their flocks, numbering sometimes 200 or 300 head of animals, and, armed with long bamboos having a curved sharp knife at the head, they go in gangs along a road, lopping off large and small branches for their goats to feed on; if prevented or checked, they turn upon and assault the road *máli* or *mashki*; if prosecuted, they escape punishment by getting villagers to give evidence in their favor, because the latter are allowed to carry off the loppings. I think that zaildárs and lambardárs should be held responsible for preventing the destruction of trees near their villages. At any rate, some special measures should be taken to stop the destruction of trees by these people, who make large profits and pay no taxes.

Income from arboriculture.—The income from arboriculture has been good, though the average per annum was Rs. 24,704, against Rs. 26,827 in the previous triennial period, but the total receipts in that period were swelled by the abnormal income in 1890-91, which amounted to Rs. 38,361.

Expenditure.—The expenditure on ornamental gardens, nurseries, groves and avenues shows an average of Rs. 11,504, against Rs. 10,503 in the previous period. The following is a comparative statement of the income, expenditure and profits from arboriculture during the past two triennial periods:—

Year.	Income from gardens.	Income from roadside trees, grass, &c.	Total.	Expenditure on gardens.	Expenditure on avenues, nurseries and groves.	Total.	Surplus or profit.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs
1890-91 to 1892-93	5,695	80,481	86,176	7,425	24,085	31,510	54,666
1893-94 to 1895-96	7,024	67,088	74,112	8,836	25,678	34,514	39,598

Supervising establishment.—The arboricultural operations are divided into two parts—first, the maintenance of nurseries and groves, and the planting and maintenance of roadside avenues; second, the collection and sale of dead trees and loppings. The former is under the supervision of the Tahsíldárs, who work under the direction of the Deputy Commissioner, whilst the latter is under the direct management of the Local and District Boards.

The supervising establishment consists of 5 muharrirs or jamadárs, whose duty it is to look after the work of the *málís* and *bhistís*, and to dispose of dead trees under the direct supervision of members of Local Boards. In each tahsíl a chaprási is attached, who collects the proceeds of the sales of trees, and assists the jamadár generally. But the supervision exercised by tahsíldárs is only nominal, as these officers have a great deal of revenue and other duties, which prevents them from giving as much time to arboricultural details as it requires, and the work is almost entirely left in the hands of the muharrirs and tahsíl jamadárs. It has, therefore, been arranged, with the Deputy Commissioner's approval, to appoint 3 Superintendents of Arboriculture for the district, who will supervise the work, under the orders of the Tahsíldár and District Board, and be responsible for carrying out all arboricultural operations, which it is proposed to extend and develop considerably in future years.

Work done by private persons and village communities.—Horticulture continues to receive much attention from the people. Small fruit gardens and large orchards are being planted all over the district, as a source of profit. Small plantations of timber trees may be seen near almost every well in a village. The cultivation by *arains*, or market gardeners, of vegetables grown from imported seed is increasing. Applications are freely made for superior kinds of grafted and other fruit-trees from the District Fund gardens, which are supplied, as far as possible, to *zamíndárs* at half price.

HOSHIARPUR DISTRICT.

Rainfall.—The rainfall during the three years under review is given below :—

1893-94	...	...	...	...	...	...	...	...	52·10
1894-95	...	...	...	...	...	...	...	...	51·92
1895-96	...	...	...	...	...	...	...	...	29·12

The rainfall during 1895-96 was only about half the rainfall of each of the two preceding years, the winter rains especially being very scanty. This deficient rainfall caused some damage to young trees, transplanted during the two preceding favorable years.

The rains of 1893-94 and 1894-95 were copious, and the season very favorable.

Nurseries.—The area added to nurseries during the triennial period under report was 1·25 acres in 1895-96. Nurseries were formed at convenient spots on roadsides in all four tahsíls of the district, as the existing ones were found insufficient for the number of plants required to fill up gaps on roads, planted out up to the end of the previous triennial period. The total area now under nurseries is 5·98 acres.

Groves.—The area under groves was neither added to nor diminished during the three years under report.

It is proposed during the current financial year to cut down a grove of old country mango trees, which bring in no appreciable income, on 1·32 acres of land in the station garden, and convert it into a nursery for fruit-trees, not obtainable in this district, for distribution to *zamíndárs*. During 1895-96 the District Board purchased 100 *langra* and 100 *bára masi* mango plants through the Collector of Benares; 96 plants died, and 33 have been sold at Rs. 2 each to well-to-do villagers, and the rest are to be planted in the new fruit nursery, and grafts sold at a reduced price. The demand for Malda and Bombay mangoes, orange grafts, *loquats* and peaches still continues.

Avenues.—The length of roads planted during the three years 1893-94, 1894-95 and 1895-96, was 6·34 miles, as detailed below :—

1893-94.

		Miles.
(1).	Garhshankar-Santokhgarh road	3
(2).	Garhshankar-Núrpur road	3
	1895-96.	
(3).	Garhshankar-Santokhgarh road	0·34
	Total ...	6·34

The extension of avenues on the above-named roads was carried out in accordance with the plan of arboricultural operations sanctioned for this district, and which has now been completed. It is proposed eventually to plant out the 72·66 miles of roads, detailed below :—

		Miles.
(1).	Kolián-Miáni road	17
(2).	Hájipur-Talwára road	8
(3).	Hájipur-Mánserah road	9
(4).	Garhshankar-Satokhgarh road	11·66
(5).	Garhshankar-Núrpur „	15·00
(6)	Bálachaur-Núrpur „	12·00
	Total ...	72·66

An improved scheme of roadside arboriculture and repairs to roads has been in force in this district since July 1895. On each of the principal roads in the three tahsíls of Hoshiárpur, Dasúya and Garhshankar, a gang of *máli beldárs*, under a jamadár, has been appointed to keep the road in good order, and to water and hedge young trees on the roadside, and to fill up gaps in avenues. The introduction of this scheme into the hilly tahsíl of Una was unnecessary, as most of the roads in this tahsíl are unsuitable for roadside planting. The old plan, of a number of *málís* under one tahsíl jamadár, continues in force here. The new scheme promises to be successful in improving the state of the roads, and the condition of roadside trees. All the main roads have now avenues along them. In addition to planting new avenues, the establishment was sufficiently employed in maintaining the extensive plantings of previous years, and in filling up the large clearances of inferior trees on the Hoshiárpur-Rúpar road, made during 1892-93.

The total number of trees planted out during the three years under report was as detailed below :—

Mango	3,783
Jáman	512
Shisham	22,190
Túm	102
Eucalyptus	174
Bamboo	15
Pípal	776
Pípal cuttings	1,855
Pilkan	5
Kíkar	351
Beri	13
Phula	8
Date	180
Túl	13
Sarín	4
Total ...	29,981

Thinning and clearing of avenues.—The sum of Rs. 996 was realized from the sale of loppings of trees during the three years under report.

The following general rules have been issued on the subject of pruning :—

I.—A height of 10 feet over the whole breadth of the road formation should be kept clear of obstruction.

II.—No branch of a mature tree should be allowed to project over the road berm within this limit of height. Further, to ensure an equal and straight growth of the line of trees alongside the road, the offside should be similarly cleared to the same height.

III.—Care must be taken that pruning of young trees is not carried out so as to injure the growth of the trees.

IV.—The annual pruning and clearing away of branches should be undertaken during the months of November, December and January, but branches, which are found to obstruct traffic materially, should be removed with as little delay as possible, whenever observed, without waiting for the annual clearance.

V.—Thick branches are to be removed by means of a saw, and small branches with the *dátri*.

Experimental cultivation.—The following descriptions of *Eucalyptus* have been tried in this district :—

Eucalyptus tereticornis.
Eucalyptus rostrata.
Eucalyptus goniocalyx.
Eucalyptus globulus.
Eucalyptus citriodora.

The *Eucalyptus tereticornis* has been tried in and near the Sadr station, and in tahsíls Dasúya, Garhshankar and Una. There is a fine avenue of them on one of the station

roads. Those grown at Hoshiárpur and Una have been most successful. The experiment with *Eucalyptus rostrata* has also succeeded pretty well. The other species have been a failure in this district. The following are the girth measurements of six trees at Una and six at Hoshiárpur, taken at a height of 4 feet from the ground :—

Hoshiárpur.—2 trees, girth 6 feet 6 inches; 2 trees, girth 6 feet 4 inches; 1 tree, girth 6 feet 3 inches; 1 tree, girth 6 feet.

Una.—3 trees, girth 6 feet; 2 trees, girth 6 feet 4 inches; 1 tree, girth 6 feet 2 inches.

Ten lbs. of *Robinia pseudo-Acacia* seeds were supplied by Conservator of Forests, Punjab, for sowing in the *chos*, in March 1896, which were distributed as follows :—

	lbs
Khánpur bands	1
4 Tahsíldárs, 1 lb. each...	4
Station gardens	5
	10

The seeds have germinated in the station gardens, Khánpur *bands* and in the tahsíl nurseries, and the plants will now be planted out in the *chos*. The plants are all healthy and vigorous. Those on the Khánpur *bands* are doing well.

Two maunds of seed of *Acacia melanoxylan* were obtained from the Assistant Conservator of Forests, Naini Tál Division, in June 1894, and sent to Tahsíldárs for distribution to zaildárs and lambardárs, but the experiment did not succeed. Another maund of seeds will be sent for, and the next experiment made under close supervision, at the Sadr station, as far as possible.

Three-and-a-half lbs. of *Inga dulcis* seeds were supplied by the Director of Land Records and Agriculture, Punjab, in March 1894, and the experiment made with them was successful. There is a young hedge of *Inga dulcis* in the station gardens, which promises to do well.

Some *marram* grass seed and seedlings were supplied by Government for experiment. Two-thirds of the seed did not germinate. The other one-third has done excellently, and arrangements are being made to make use of it to a large extent in the *chos*. The Khánpur *bands* have been planted over with it. Twelve tolás more of the seed have now been received, and will be experimented with this year. The seedlings did not sprout, and their failure appears to be due to their being in a withered state when received.

Other grasses and trees which have been successfully used for binding the soil on the banks of nullahs and on embankments are the following :—

Grasses—Narra, kharkána, khabal, káhí and kákar.

Trees—Baid, báns, bana, and japolota.

Cattle trespass and lopping.—One of the chief difficulties in raising plants is the damage done to them by cattle and goats. Cattle found injuring trees are impounded.

A *Cactus* fence has been found to be the most effective in preventing damage to young trees, as well as the most economical. It is also the most lasting. As saplings of less than 4 feet to 5 feet are not planted out on roadsides, the fences in this district are made about 5 feet high. Open brick-work and wire-netting would be good for fences, but are very expensive. Mud walls are not of much use, as they tumble down in the rains. Fences of dry thorns or branches are used, where *Cactus* is not procurable.

The lopping of branches of trees is done with a hand-saw, and of small branches with the *dátri*.

Fodder trees.—Much attention has been paid to the subject of planting out *pípal* trees and cuttings during the year 1895-96, and altogether 776 *pípal* plants and 1,855 *pípal* cuttings have been planted on roadsides during the period under report. It is intended to increase the proportion of *pípal* plants and cuttings planted out on roads during the next triennial period. Three hundred and twenty-seven *kíkar* trees have also been planted out on roadsides. This description of tree has not usually been planted out on roadsides, as it does not conform to the conditions of a good avenue tree, but a larger number will be planted out in future.

Encroachments on roadside trees.—Encroachments on roadside trees by *zamíndárs* have greatly increased of late; this is especially the case in the civil station, where there are gardens and compounds attached to houses, whose boundaries are within the limits of the station roads, or join the boundaries of the roads. Trees which have been planted and

cared for by the District Board, and which are now of great value for building and other purposes, are being claimed by different individuals, who in some cases have only recently enclosed them within their hedges. The District Board has lately had much litigation with regard to ownership of roadside trees with *zamíndárs*, and has recently lost a case, referring to the ownership of a tree on the station roads, which will probably result in much loss to the District Board. When roadside avenues were first laid out, much regard was not paid to the question, whether the land belonged to the road or to the villagers, and in many cases the avenues were planted through the agency of the *zamíndárs*. No claims were brought forward while the trees were young and useless, but, now that they are valuable, they are being fought for by owners of land adjoining the roads.

Financial results.—The following is a comparative statement of the income, expenditure and profit or loss from arboriculture during the past two triennial periods:—

Year.	Income from gardens.	Income from sale of roadside trees and loppings, &c.	Total.	Expenditure on gardens.	Expenditure on arboriculture.	Total.	Profit or loss.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1890-91 to 1892-93	2,105	23,556	25,661	3,933	20,545	24,478	+1,183
1893-94 to 1895-96	2,092	14,881	17,573	3,695	20,873	24,568	—6,995

The decrease in the income from sale of roadside trees and loppings, &c., is due to the large amount which was realized in 1890-91 to 1892-93 from sale of *phula, túl, beri, sarín, kíkar, dek, &c.*, trees on the Hoshiárpur-Rúpar road, whereas no such large sale was held during 1893-94 to 1895-96.

The decrease in the expenditure on gardens is due to the Sadr Kacherry garden and the Dasúya tahsíl garden having been leased out on *chokota* and the *málís* dismissed. The small increase in the expenditure on arboriculture is due to the extension of avenues, and to the new arrangements which have been made for tree-planting and repairs to roads.

Establishment.—The following is the detail of the establishment now employed on the maintenance of existing trees and nurseries, and the plantation of new avenues and nurseries, the expenditure being charged half to Civil and half to Public Works:—

Tahsíl Hoshiárpur.

	Rs.	a.	
1 Jamadár	10	0	per mensem.
5 Do.	7	0	„ each.
54 Máli-beldárs	4	8	„ „

Tahsíl Dasúya.

1 Jamadár	7	8	per mensem.
9 Do.	7	0	„ each.
1 Máli-beldár	5	0	„
80 Do.	4	8	„ each.

Tahsíl Garhshankar.

1 Jamadár	8	0	per mensem.
9 Do.	7	0	„ each
72 Málís	4	8	„ „

Tahsíl Una.

1 Jamadár	8	0	per mensem.
20 Málís	4	0	„ each.
1 Do.	3	0	„
1 Do.	1	0	„

The establishment for gardens is as follows:—

1 Máli	8	0	per mensem.
7 Málís	5	0	„ each.
3 Do.	4	0	„ „
2 Do.	2	8	„ „

The establishment was supervised by the Presidents and Members of Local Boards and by zaildárs.

The map submitted with the last triennial report is resubmitted with a tripled-otted red line marked on it, to show the roads planted with young trees during the triennial period under report. The map also shows the nurseries established during 1895-96.

SIMLA DISTRICT.

Rainfall.—The average rainfall of the triennial period under report has been somewhat in excess of that of the past. The heaviest rainfall, it will be noticed, was in 1894-95 when it far exceeded the average.

Nurseries.—The total area under nurseries is 8·02 acres. Fruit-trees are the principal things grown for distribution by Government and for sale. The total number of fruit-trees distributed was 2,985. Prior to 1893 trees were mostly distributed to Government officials, who owned estates in the Simla station and adjoining Native States. Since that year the distribution to Native States has been continued, but the greater portion has been made over to the two Tahsildárs in the district for distribution to *zamíndárs*, who have taken a keen interest in fruit culture. The trees are propagated at the Mahasu orchards, a few miles out of Simla.

Plantations.—Seven acres only were planted with trees, *i.e.*, six acres in 1893-94 and one acre in 1894-95, but of the plantings made in 1893-94 two acres failed, so that the successful plantings amount to only five acres in all.

Groves.—There are no groves in Simla proper, but at Kálka, at the foot of the hills, 13·62 acres are planted in the encamping-ground. The trees are in a flourishing condition.

Avenues.—Owing to the hilly nature of the district, it is impossible to plant any lines of trees. At Kálka, however, where the ground is more or less level, 2·66 miles are planted with trees.

Income and expenditure.—The total income and expenditure during the three years, 1893-94 to 1895-96, has been Rs. 47,606 and Rs. 42,479, respectively, giving a surplus of Rs. 5,127. Below in tabular form is compared the income and expenditure of the present period with that of the past :—

Income.

Years.	Ornamental gardens.	Nurseries.	Plantations.	Groves and avenues.	Miscellaneous.	Total.
1890—93	31,043	...	8,372	...	3,536	42,951
1893—96	32,066	1,330	10,190	...	4,020	47,606

Expenditure.

Years.	Works.								Establishment.	Total.
	Ornamental gardens.		*Nurseries.*		*Plantations and afforestations.*		*Groves and avenues.*			
	Maintenance and repairs of existing gardens.	Extension of gardens.	Maintenance and repairs of existing nurseries.	Extension of nurseries.	Maintenance and repairs of existing plantations and afforestations.	Extension of plantations and afforestations.	Maintenance and repairs of existing groves and avenues.	Extension of groves and avenues.	General supervising establishment, including office establishment.	
1890—93	19,843	...	2,077	1,126	8,906	...	...	...	13,420	45,372
1893—96	18,366	...	2,202	500	6,323	350	157	...	14,581	42,479

HAZARA DISTRICT.

Rainfall.—The total rainfall during the last three years was :—

1893-94	82·36
1894-95	63·79
1895-96	41·90

and the average of the triennial period was 62·68, that is 17·84 in excess of the average rainfall of past years. The rainfall in 1893-94 and 1894-95 was much above the average, as shown in the statement, but in 1895-96 it was below the average of the last five years, especially in the winter season.

Nurseries.—There are nine nurseries in the district, under the charge of the District Board and Municipal Committees, and, on the whole, they are doing well.

About 500 young trees of different varieties were distributed amongst *zamíndárs* free, or at a nominal price, for private plantations.

The following young trees were supplied to the Secretary of the Grass Committee, Abbottabad, for the Military *rakh*, at a nominal price of one anna per tree :—

	Trees.
1893-94	500
1894-95	804
1895-96	731

About 800 fruit-trees were obtained from the Annandale garden, Simla, during the last three years, of which 200 were distributed amongst jagírdárs and lambardárs, and the remaining 600 were planted in the public gardens, Abbottabad, Mansehra, Chittigatti, Khoti-ki-kabar and Haripur. Those planted in the Mansehra tahsíl were much damaged by the deficient rainfall. A plot of land was added to the Mànsehra nursery garden during 1895-96, for the cultivation of fruit-trees and other young plants.

Plantations.—The Statement No. III shows the area under plantations in the Sarhan and Civil *rakhs*, Abbottabad.

A large number of young trees are planted every year in these *rakhs*, but very few young trees succeed, owing to the scarcity of water on these hills during the hot weather.

The existing trees in these two *rakhs* are now in a flourishing condition.

Groves.—No new groves were planted during the triennial period under report.

Some 400 young trees were planted on the Band Kot Najibulla on the Haripur-Sarai Kala road, and are doing well.

Avenues.—Most of the roads under the charge of the District Board are situated in hilly tracts, where tree-planting is either unnecessary, owing to the country traversed by the road being already well afforested, or impossible, owing to the physical configuration of the locality.

A few miles of the Haripur-Khánpur and Chittigatti-Baffa roads were planted with young trees.

The work done during the last three years has consisted mostly of replacing dead trees with fresh ones, and of planting up gaps.

Cultivation of fruit-trees.—There are several fruit gardens in the district, especially in the Haripur tahsíl.

The Municipal Committees of Haripur and Abbottabad keep up large establishments for the maintenance and preservation of their extensive gardens.

The people of the district are encouraged in fruit cultivation by providing them with young fruit-trees free of cost, or at a nominal price, so far as the District and Municipal Board nurseries can admit of this distribution.

Fodder trees.—No trees are planted for fodder, but leaves of certain trees and plants are used for feeding cattle.

Work done by private persons.—No private individual has done any tree-planting, or arboricultural work, of sufficient importance to deserve special mention in this Report.

The inhabitants of this district are very fond of planting fruit and other useful trees on their private lands, and also in burial-grounds and round tanks and wells.

Income.—The total income derived from all sources and credited to the District Fund was—

	Rs.
1893-94	178
1894-95	194
1895-96	280

and to Municipal Funds—

1893-94	1,987
1894-95	2,562
1895-96	1,920

The income both under the District and Municipal Funds has improved since the last triennial period.

It would have been much greater, had the fruit crops not been damaged by the hailstorms, which occurred more than once during the last three years.

Expenditure.—The total expenditure was—

District Funds.

	Rs.
1893-94	744
1894-95	714
1895-96	669

Municipal Funds.

1893-94	1,738
1894-95	1,862
1895-96	1,823

The establishment kept up by the District Board and Municipal Committees is as follows :—

District Funds.

	Rs.
1 Máli at Rs. 7 per mensem for Abbottabad nursery	84
2 Mális at „ 6 „ „ each for Civil rakh	144
1 Máli at „ 6 „ „ for Sarhan rakh	72
1 Do. at „ 6 „ „ for Dhobighât	72
1 Do. at „ 6 „ „ for Mansehra	72
1 Do. at „ 6 „ „ for Chittigatti	72

Municipal Funds.

Haripur—

1 Jamadár Máli at Rs. 15 per mensem	180
1 Assistant Máli at „ 7 „ „	84
1 Máli at Rs. 6 per mensem	72
8 Mális at Rs. 5 each per mensem	480

Abbottabad—

1 Jamadár Máli at Rs. 15 per mensem	180
1 Assistant Máli at „ 7 „ „	84
4 Mális at Rs. 6 each	288
1 Máli at „ 5	60
1 Do. at „ 2	24

Supervision.—There is no special supervising establishment, the Overseer, Local Funds, and the Tahsíldárs, in their respective tahsíls, exercise the necessary supervision.

General remarks.—The slow progress of arboriculture in this district is chiefly due to the fact that the Local Bodies here are so poor that they can hardly meet the fixed and compulsory charges of various establishments, and very little money is left even for the Public Works charges.

The demands of the Educational and Medical Departments are daily increasing, and swallow up most of the Budget allotment.

KANGRA DISTRICT.

Rainfall.—This return gives the rainfall for the Sadr station, and the entries give no correct idea of the rainfall of the district generally.

Nurseries.—During the triennial period under report only gaps in the existing nurseries were filled up, and ·125 acre of land was added to the nursery at Tahsil Pálampur.

Plantations.—There are no such plantations in the district as defined in footnote (*a*) of the return.

Groves.—Regarding the grove on the Núrpur dâk bungalow hill, the trees are coming on pretty well, and the brushwood is increasing. The plantation shows what can be done with a bare rocky piece of ground, but it has cost a great deal of money.

The expenditure on the plantation has been as follows :—

	Rs.	a.	p.
Fencing and repairs	147	4	0
Cultural operations	448	12	9
Pay of máli	238	5	2
Total cost of forest work for which no details are available.	237	9	4
Rs.	1,071	15	3

The cultural operations consisted in sowing *chil* seed in 10,560 patches in the plantation, transplanting 650 *bahera, jáman*, date, *Eucalyptus* and bamboo plants in 1888-89, at a total cost of Rs. 570-10-6, including resowing of failures in *chil* plots; in sowing *chil* and *Robinia* seed, and transplanting *táli* and willow cuttings, and replacing plants which had died in the avenue in 1890-91, at a total cost of Rs. 106-6-0; in sowing 5 acres with *chil* in 1891-92 (this includes the cost of fencing), and transplanting the avenue plants at a total cost of Rs. 23-2-0; in sowing 13 seers of *chil* seed in 1892-93 at a cost of Rs. 2-4-0.

The results of the above work, at the present time, may be said to be almost an entire failure. The plantation at the present moment contains a number of scattered *chil* trees, chiefly situated in the nullah which runs through the plantation, and towards the lower end of it. These are at present in a fair condition of growth. They do not, however, represent anything like the total number of sowings. As regards the remaining kinds of trees planted and sown, none exist at the present moment, except the trees planted along the road, leading alongside the plantation to the bungalow, which are in a fair condition, with the exception of a few that require replacing.

With the exception of the *chil* mentioned above, the plantation contains only *gárna* bushes, which are gradually spreading, and will in time cover all the soil in the plantation.

The area has been resown over and over again in the years following the original operations, and the total result are the *chil* trees mentioned above, which appear to be the result mainly of the original sowings. The seed all germinated fairly well, and the plants grew to a height of 2" to 3", and then, as soon as the roots touched the hard layer of rock underneath, they die away. The soil on the area is very shallow, and the rock underneath hard and impermeable to the roots, and it is very little use attempting anything more just now. Work on the plantation was stopped in 1892-93, and nothing has been done since, except to keep the fences in repair.

I would recommend that, at any rate for some years, no further expense in the way of operations should be incurred; the area should be kept closed, and fences kept in repair; but all other expenses should be stopped. There is no advantage now in keeping on a professional *máli* at Núrpur, all repairs to the fences could be done by ordinary coolies, under the superintendence of the Forest guard stationed at Núrpur, and he could also look after the plantation in addition to his ordinary duties.

The other groves in the Kángra Dispensary and *patwárkhána* and tahsíl compounds, as well as the Kutcherry gardens, were maintained in fair condition during the triennial period under report. Besides this, ·6 acre of land was added to the tahsíl garden at Pálampur, and fruit trees received from the Simla gardens were planted in it.

Avenues.

Years.	Length of roads fully stocked with trees at beginning of year.	Length of roads planted during the year.	Length of roads which has failed during the year.	Length of roads which were fully stocked with trees alive at the end of the year.
	Miles.	Miles.	Miles.	Miles.
1893-94	367·34	66·69	39·27	394·76
1894-95	394·76	27·97	14·89	407·84
1895-96	407·84	14·941	5·82	416·95

Thus the successful work during the last three years was 49·615 miles, which was nearly the same as in the previous triennial period, *viz.*, 49·34.

The length of roads planted during the triennial period under report was 109·601 miles, as compared with 88·14 miles during the previous triennial period.

The increase of 21·461 miles is due to the fact that in the year 1893-94 66·69 miles of roads were planted with trees.

Trees were mostly planted on new lines, but gaps in the old roads were also filled up. This was the concluding year of the quinquennial programme of arboricultural operations, extending over a period of five years, from 1889-90 to 1893-94. The length of road which failed during the period amounted to 59·986, as compared with 38·80 miles in the previous triennial period. In order to utilize the services of the District Board members, the Board has agreed, as an experimental measure, to entrust the road from Sulah to Bhawarna to Mr. Greensill, who promises to give 100 plants of *oi, tún*, mango, and *bohar* for every tree cut, and maintain the 100 plants for three years.

I am a little doubtful about this experiment; but Mr. Greensill is an active and most useful member of the Board, and can be trusted to do his best.

Income.

Years.	Gardens.	Avenues.	Total.
	Rs.	Rs.	Rs.
1893-94	198	497	695
1894-95	264	591	855
1895-96	178	423	601
Total	640	1,511	2,151
Total 1890-91, 1891-92, and 1892-93	824	2,375	3,199

There has been a falling-off of Rs. 1,048 in income, as compared with that of the previous triennial period, *viz.*, Rs. 184 in the receipts from gardens, and Rs. 864 in the receipts from avenues. The reason is that there were more high winds and storms in the previous triennial period, by which many trees were blown down, the sale of which increased the receipts under this head. The falling-off in receipts under "Gardens" is partly due to the fact, that in the previous triennial period some big trees were cut from the Kutcherry gardens, to make room for strawberry beds and vegetables. The trees were sold, and the sale-proceeds increased the receipts under this head. The decrease is also partly due to the transfer of some regular subscribers to the gardens from the station. There is in this district no hope of making the sale of roadside trees a good source of income. The people get their firewood from the forests free, and will not buy trees, unless they are very large and are suitable for building timber, and even then they will give only a very small price for them.

Expenditure.

Years.	Gardens.	Nurseries.	Groves and avenues, &c.	General supervising establishment.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.
1893-94	809	310	2,520	252	3,891
1894-95	754	...	2,163	252	3,169
1895-96	758	...	961	252	1,971
Total	2,321	310	5,644	756	9,031
Total 1890-91, 1891-92, and 1892-93 ...	2,855	1,528	5,975	740	11,090

The decrease of Rs. 2,059 in the expenditure, as compared with the previous triennial period, *viz.*, Rs. 534 under groves, Rs. 1,213 under nurseries and Rs. 331 under avenues, is due to the restriction of tree-planting to the important roads of the district.

After the expiry of the five years' programme, the Tahsíldárs, who are also the Presidents of the Local Boards, were called on to report on the result, and also to make suggestions, as to the maintenance of the existing trees, with regard to reduction of establishment, if possible. On the receipt of the reports, it was thought necessary to maintain the existing trees, and reduce the expenditure for 1894-95 to Rs. 2,000, and for other years to Rs. 1,000. The establishment for roadside trees was out of all proportion to the sums available for repairs of the roads. The Tahsíldárs like to have permanent gangs of coolies in their tahsíls, engaged in planting out or tending trees. I have seen trees being planted on roads, which were very badly in need of repairs.

The Board resolved to reduce its expenditure on roadside trees, but to maintain a small establishment on certain main roads, and to concentrate its efforts, instead of planting out trees everywhere, without regard to the state of the road, or the possibility of tending the trees.

General.—Cultivation of fruit-trees and their distribution among villagers, &c.—In the year 1893-94 the Director of Land Records and Agriculture, Punjab, supplied the fruit-trees noted below—

Apple trees	100	Received from the Annandale gardens, Simla.
Peach „	100	
Pear „	200	
Cherry „	25	
Total	425	
European budded apple trees	103	Received from the Agri-Horticultural gardens, Lahore.

These were distributed to the owners of gardens at Dharmsála and tea planters at Pálampur, and were also planted at the Kutcherry gardens at Dharmsála and the tahsíl gardens at Pálampur and Kángra. They were reported to be doing well.

In the year 1894-95—

Apple trees	500	Received from the Annandale gardens, Simla.
Peach „	50	
Chestnut „	25	
Pear „	100	
Cherry „	75	
Total	750	

Half the pear trees were sent to Kulu, as they are not a success at Kángra : it is too wet ; and the rest were distributed to professional fruit-growers at and around Dharmsála, 125 apple trees were sent to Kulu, 125 retained at Dharmsála, and the rest divided in equal parts between Kángra and Pálampur.

The cherry trees were also divided in the same way as the apples.

Peach trees were planted at Dharmsála, and some were sent to Kángra and Pálampur.

Chestnut trees were sent to Pálampur and distributed at Dharmsála.

The trees were distributed to the villagers, owners of gardens at Dharmsála, Kángra, Pálampur and Kulu, and also planted at the public gardens at Sultánpur, Nagar, Kángra and Pálampur, where they, with few exceptions, are doing well.

In 1895-96—

Apple trees	200	Received from Mahásu orchard, Simla.
Pear „	150	
Peach „	100	
Cherry „	75	
Plum „	20	
Chestnut „	25	
American seedling peach trees	100	
Total	670	

One hundred pear and 100 apple trees were sent to Kulu, and the rest of them were divided among Dharmsála, Pálampur and Kángra. Plum and peach and cherry trees were equally distributed among Kulu, Kángra, Pálampur and Dharmsála. Six chestnut trees were put in the Kutcherry garden at Dharmsála, 6 at the Kángra tahsíl garden, and 6 at Pálampur tahsíl garden (new), and the rest were distributed to the residents at Dharmsála.

The plants are doing well, with the exception of a few which withered and died of dry cold.

As was stated in the report of the last triennial period, it is too soon to be able to report on the experiment of fruit growing in the Kángra and Pálampur tahsíls. Some apple trees have commenced fruiting during this triennial period in Kulu and the Kutcherry gardens at Dharmsála. The fruit, though injured by hailstorms, was excellent. Cherries are not very successful anywhere. Pears do not do well in the Kángra Valley, even where there is less rainfall than at Dharmsála. Apples should do better. The professional fruit-growers in Kulu do not care for the Simla plants, which are said to introduce blight into their gardens.

KULU SUB-DIVISION.

The rainfall return has been filled in, but there have been no arboricultural operations in Kulu for the last three years, at least none undertaken on behalf of the District Board. Passing along the roads of the Sub-division, I occasionally notice round stone structures (called *gamla* in Kulu), which have evidently been erected with a view to the protection of young seedlings on the roadside. But the seedlings planted in these have died in every case that I can remember, except a few, perhaps fifty, on the road above the Dalasni bridge between Bajaura and Larji, and a very few on the Palách-Nirmand road. Considering the large number of sheep and goats which constantly travel along the roads in Kulu, I should say that any attempt to get roadside trees to grow is foredoomed to failure in the future, as it has been in the past, unless an expenditure be incurred, which would be out of all proportion to the value of the possible results.

CANAL DIVISIONS.

1ST DIVISION, BARI DOAB CANAL.

District Gurdáspur.—But little was needed to be done, as this part of the canal has been established a long time. An area of 16·15 acres has been added to the plantations, and an area of 44·00 acres has been cleared of trees, in order to allow of improvements being made to the canal. A mile of avenues has been added, and 1·4 mile had to be cut down, to allow of repairs being carried out. The total expenditure in this district for the past three years has been Rs. 4,194, and the income Rs. 27,455, showing a profit of Rs. 23,261.

District Amritsar.—The plantation area has been increased by 42·6 acres, and the length of avenues by five miles. The expenditure has been Rs. 6,853 and the income Rs. 3,937, showing a loss of Rs. 2,916.

District Lahore.—The increase in the plantation area has been 6·5 acres, and in the length of avenues one mile. The expenditure has been Rs. 1,290 and the income Rs. 16, showing a loss of Rs. 1,274. As a whole the profit from plantations during the past three years has been Rs. 19,071.

2ND DIVISION, BARI DOAB CANAL.

Plantations.—The area under this head at the beginning of the year was 1,428·31 acres. It was stated in the last triennial report that some part of the plantation at Kohâli, on the Lahore Branch, would be sown with *kikar*. This was done in 1893-94, an area of 3·49 acres being then sown. The same area is shown as failure, as the *shisham* seed sown in 1892-93 failed to germinate.

In 1893-94 a plantation was formed on Main Branch Lower, between R. D. 94 and 101, (Vallah bridge and Grand Trunk Road bridge) on both sides of the canal, the area planted being 25·48 acres. The old plantation was first cleared of all except the line trees (avenues), and the produce sold. The area cleared is shown as failure during the year in Table III. The total area of plantations at the end of the year equals that at the beginning, as all the area sown replaced an equal area which had failed, or been cleared, and the produce sold, and amounts to 1,428·31 acres.

Avenues.—The length of avenues at the beginning of the triennial period was 103·06, miles and was the same at the end of the period. There are a few gaps, but, on the whole, the avenues are in a flourishing condition. The gaps occur, as a rule, in places where the soil is affected by *reh*, and is, therefore, unsuitable for trees. The avenues consist principally of *shisham* and *kikar*. There are also some few *tún* and mulberry trees.

Dead trees in the avenues are not replaced, it being found expensive to do this. When a portion of the canal is disforested and restocked, the dead line trees of that part are replaced by young ones. At present this is being done between B. M. 75 to 80 and B. M. 94 to 101.

Income and expenditure.—The total expenditure during the period under report is Rs. 7,017, against Rs. 10,358 during the previous triennial period. The expenditure in 1893-94 and 1894-95 was incurred principally on special maintenance of the Vallah plantation, B. M. 94 to 101, Main Branch Lower. The expenditure on this account was much reduced in 1895-96 and in 1896-97 it will almost disappear.

The income for the three years amounted to Rs. 20,227, against Rs. 31,202 during the three previous years. The decrease is due to reduction in the sale of timber. The timber near Amritsar has been sold, and there is no new area being disforested. Further sales will, in future, be effected from some old rájbaha land.

The net profit on plantations during the three years amounts to Rs. 13,210, against Rs. 20,844 during the previous three years; the falling-off being due to a smaller area disforested, and, therefore, smaller sales of the produce of clearing.

3RD DIVISION, BARI DOAB CANAL.

Nurseries.—There are no nurseries in this Division, any requirements being met from the newly enclosed plantations.

Plantations.—An area of 23 acres of land on the left bank of the Main Branch Lower from R. D. 120,000 to 130,000 was selected last cold weather. After the old timber

had been removed, the ground was prepared, levelled, and the site fenced in. The whole area will be sown with *shísham* seed early in the next official year.

The three miles shown as failures during the year 1893-94 is due to the felling of trees, to allow for the widening of the Luliáni Rájbaha.

Avenues.—These are line trees along the canal, one row on each bank. There were no operations under this head during the triennial period under review, as the lines are all stocked on both banks. The one mile of trees, shown as failure during 1893-94, and two miles during 1894-95, are due to trees blown down by storms, and dry trees felled at different places.

Revenue and expenditure.—There was an income of Rs. 27,733 during the three years. Of the total, Rs. 16,662, shown under plantations, Rs. 11,662 were the sale-proceeds of wood on the Vahn Escape, and Rs. 5,000 of trees cut from the plantation on the Main Branch Lower. Rs. 1,913, shown under avenues, were the sale-proceeds of trees cut down from line trees along the canal banks, and Rs. 9,158, shown under head "miscellaneous," were the sale-proceeds of grass on the banks of canals and rájbahás.

The total expenditure during the three years was Rs. 5,188, of which Rs. 4,130 were spent on the maintenance of existing plantations, Rs. 89 on starting a new plantation, Rs. 602 on maintenance of avenues, and Rs. 367 on ornamental gardens. Hence the net receipts during the triennial period amounted to Rs. 22,545.

UPPER SUTLEJ CANALS DIVISION.

Plantations.—The only plantations on these canals are in the chauki compounds, and consist principally of *shísham* and fruit-trees. There are good *shísham* plantations at Ganda Singh, Hussain Khanwála, and Ladián on the Katora Canal; at Mámoki and Dipálpur on the Khanwáh Canal; at Lolá Gudár, Malkána and Taher on the Upper Sohág Canal; and on Lolá Gudár, Shahamud, Havali Kálewal and Chanwat on the Lower Sohág Canal. Besides *shísham*, there are some *kíkar* and a few mulberry and *siráa* trees too. The trees in these plantations are so far grown up as to require no artificial watering. At Kulyána the trees are in fair condition, but they are low in stature and young, and require watering and careful tendering. Situated on a mound, the remnant of an old village site, Siyakka chauki, on the Khanwáh Canal, is not favorable for the growth of plantations. The subsoil is a poor earth, mixed with brickbats and salt efflorescence. The *shísham* trees planted there many years ago are still very low and make very little progress. A plantation has also been started at Mámoki Sub-divisional Office during 1894-95.

There exist nice little fruit gardens in the compounds of the chaukís at Gunda Singh, Mámoki, Lola, Dipálpur, Havali and Kálewál, and about 400 fruit-trees have been planted during the three years under report at different chaukís. The date-palms in Mámoki chauki, that had attained a height of over 12 feet, as reported in the last triennial report, all died, when the compound was flooded in 1894. In other chaukís these palms are promising, but they have not attained a height above 6 feet, except at Lola, where two of them are about 9 feet high. None of the trees have borne any fruit as yet. As the compounds of all the chaukís are pretty well stocked with trees, there has been no increase in the area of plantations.

Groves.—There are no groves in the Division.

Avenues.—There are no avenues, properly so-called, in the Division. Those shown in the statement are common country trees, spontaneously grown, which, for the most part, line the canals. They consist almost entirely of *kíkar*, with some *shísham*, tamarisk, and a small proportion of *jand*, *ban* and *karír* trees.

These trees mostly grow near the inner edge of the channel, and are very frequently blown down into them by high winds and duststorms, which prevail in this part of the country. To prevent this, all trees growing within 10 feet of the edge of the channel are cut down and sold.

On the Lower Sohág Canal there are no trees, except tamarisk and a few *kíkar*, that have grown up spontaneously on the main line, miles 25 to 33; Sohág Branch, miles 6, 7, 8 and 16 to 20; the first ten miles of Pára Branch; and on the Havali, Musewal and Pákpattan Rájbahás, for about a couple of miles near their head-reaches. The tamarisk on the Pára Branch are growing luxuriantly, and have attained a height of from 10 to 15 feet.

Income.—The income is derived principally from the sale of fallen and dead trees; also from green trees, cut down within ten feet of the edge of the channel; and from sale of

grass and from *manj sarkandá* reeds, which grow up spontaneously. The income for the three years under report is given below:—

	Rs.
1893-94	7,412
1894-95	6,191
1895-96	9,650
Total ...	23,253
Average ...	7,751

The average income during the three years under report was Rs. 7,751, compared with Rs. 7,634 during the previous period. The income under sub-head "miscellaneous," or sale of grass and *sarkanda*, which had fallen to Rs. 1,658 in 1891-92, increased to Rs. 2,270, on an average, during the three years under report. The increase was due to the fact that, near large towns and villages, a higher amount was realised, owing to the large demand for fodder during the past three years. The increase under the head "plantations" in 1895-96 was due to the supply of a large quantity of canal wood for burning bricks, and for constructing and renewing wooden bridges, in Chunián and Pakhoki Rájbahás.

Expenditure.—The expenditure incurred has almost entirely been on maintenance and extension of plantations in chauki compounds. The principal expenditure was incurred on watering plants by Persian wheels, where suitable wells were available, or by *bhistis*. These canals run only for a part of the year, and most of the chauki compounds are too high to be irrigated by flow. The plants are, therefore, watered almost entirely from wells.

The expenditure for the three years has been in —

	Rs.
1893-94	2,629
1894-95	3,532
1895-96	3,401
Total ...	9,562
Average ...	3,187

against an average of Rs. 2,072 in the previous three years. The increase is chiefly attributable to starting new plantations of fruit-trees in several chauki compounds, and watering them by Persian wheels. The average annual income exceeds the average expenditure by Rs. 4,564.

MULTAN CANALS DIVISION.

Sidhnai Sub-division.

Arboriculture operations have now been carried on in the Sidhnai Sub-division for ten years, the report now submitted being the third report.

At the close of the last triennial period, *viz.*, March 1893, the area and length treated stood as follows :—

Nurseries	13·62 acres.
Plantations	46·41 „
Avenues	26·24 miles.

The following are the net results at the end of the years 1893—96.—

Nurseries	13·27 acres.
Plantations	46·61 „
Avenues	48·49 miles.

During the triennium under report experiments were made of sowing seed on the Chawán, Kukarhatta and Mungawála Rájbahás, but the result has not been very satisfactory, owing to the failure of the canal water earlier than usual in 1895-96. Out of 21 miles sown, only nine miles have succeeded. The land, in some places is bad, where *kikar* will be tried.

The avenues on the Sidhnai Canal are, on the whole, in a very good condition, forming a handsome row of trees. The increase during the triennium has been on the Sidhnai Canal and Rájbahás. The result, on the whole, is satisfactory.

The expenditure for the three years under report was as follows :—

	Rs.
1893-94	2,338
1894-95	3,658
1895-96	2,640

The high expenditure during 1894—96 is due to expenditure incurred on the sowing of avenues along Rájbahás, and for their maintenance.

Receipts during the year 1893-94 amounted to Rs. 873-4-0, and have decreased from 1894-95, owing to the *sirkana*, which was the chief item of income, being removed from canal banks.

Chenab Sub-division.

Improvements.—Nurseries suitable for plantations and avenues have been established at the Binda, Sargána, Ilampur, Billiwála, Jalálpur, Shujabad and Buch Canal chaukís. Similar works have been started at places on the Chenáb *band*, Wah Muhammad, Durána, Langána and Sikandarabad Canals.

The canal avenues have been extended during last year on the Gajjúhatta, Lower Bakhtuwáh and Jai *band* by nearly four miles.

An extension of one mile of *kíkar* trees has been effected on the Khadal Channel, and the increase in plantations during 1895-96 at the different chaukís, and on the canal banks amounts to 3·50 acres. This also includes the stocking of the Shujabad and Ilampur chauki gardens with fruit-trees.

Maintenance.—The groves of trees existing at the chauki gardens have been kept up and added to. There are wells at the following chaukís, Ilampur, Shujabad, Búch and Billiwála.

Kasba compound has been leased out to a cultivator living close by, who has undertaken to put down fresh trees and water regularly the existing ones.

Income.—The income for the triennial period under review amounts to Rs. 18,558-12-3, while the expenditure amounts to Rs. 3,342-5-6, or a surplus of Rs. 15,216-6-9, and is derived from the sale of the spontaneous growth along the canal banks.

Receipts are realised in the usual manner and credited to the local *Zar-i-nagha* Fund. The following is a statement of receipts and expenditure :—

Year.	Expenditure.			Receipts.		
	Rs.	a.	p.	Rs.	a.	p.
1893-94	1,009	0	0	9,984	5	0
1894-95	1,109	5	6	4,360	13	6
1895-96	1,224	0	0	4,213	9	9

Sale of wood has not been so large in the years 1894-95 and 1895-96 as it was in the year 1893-94, hence the decrease in the years 1894-95 and 1895-96.

Sutlej Sub-Division.

Avenues.—The arboricultural operations in this Sub-division are confined to avenues and plantations. The avenues comprise the growth on the spoil banks and berms of the canals, with an average length of 547 miles. The growth chiefly consists of *farásh kíkar, shísham, pílu* and a few dates. The growth is spontaneous. On new channels broadcast sowing has been tried on the berms, but with the exception of the Diwánwáh Division, which has a fair growth of *kíkar* and *farásh* springing up, the net results are *nil*: this is due to want of protection.

The principal operations are confined to the bridge sites and regulators, where *beldárs* are employed from six to twelve months; the banks are levelled off and hedged in with thorns; lines of young trees are planted, and as they progress the sites are enlarged. Most of these trees are *shísham* from root suckers and cuttings.

The following statement shows the the progress by count from 1893 to 1896 :—

Serial No.	Name of plantation.	Counted in June 1893.	Counted in July 1893.	Counted in March 1894.	Counted in April 1895.	Counted in April 1896.
1	Chauki at Lodhrán	513	541	541	554	528
2	„ Miránpur	183	199	199	273	369
3	„ Jugguwála	214	214	214	214	389
4	„ Kureshewála	210	210	210	190	212
5	„ Haveli	433	433	433	307	380
6	„ Karor	298	298	298	288	506
7	„ Basantpur	12	12	12	92	114
8	„ Khánpur	77	77	77	102	123
9	„ Lál Saggu	173	173	173	168	245
10	„ Mitru	163	179	179	138	164
11	„ Islám	97	97	97	141	204
12	„ Miánpur	241	277	277	251	289
13	Bridge Mubárakwah	99	109	109	188	180
14	„ Baháwalwah Lodhrán	165	205	205	413	400
15	„ Sardárwah	95	95	95	264	337
16	„ Mahomedwah	108	108	108	159	159
17	„ Jamwah Khurd	120	120	120	141	180
18	„ Got Babár	143	143	143	181	181
19	„ Sultánwah	133	163	163	251	251
20	„ Sultánwah Chimbel	...	38	38	130	183
21	„ Abbanwah Regulator	114	144	175	179	189
22	„ Jámwah	97	127	156	175	175
23	„ Syphu Maled	220	230	319	330	338
24	„ Bah ; Mahomed Regulator	118	118	118	102	106
25	„ Gidarwah Regulator	132	132	132	145	143
26	„ Mubárakpur Branch	28	28	28	50	33
	„ Jok Mangla					93
27	„ Haveli Right Bank	...	...	...	...	92
	Total ...	4,186	4,470	4,619	5,492	6,563

Plantations.—These are confined to the chauki compounds, and 12 out of the 13 are fairly stocked with trees. The compound of the Chelewáhan chauki was taken over too late in the season to do anything to it. Nurseries are kept up at Lodhrán, Karor and Islám chaukís, where water is available all the year round, for the supply of young plants which are constantly needed for renewals.

Revenue.—The revenue is derived from loppings, sale of reeds, grass and wood, and a small revenue from fruit. The sale of loppings shows the largest revenue, and wood next. The loppings are from the *kikár*, and are bought to feed goats and cattle at so much per tree, varying from 1 anna to 4 annas each. The reeds are purchased to make mats and ropes, but the species called *Suchha khána* is decreasing, which is the most valuable, and is due to clearing the side slopes yearly.

The wood sales are mostly to our own contractors for burning bricks and lime. There are a few local purchases by *zamíndárs* themselves. There are no outside sales. Contractors do not come forward, although our rates are only 9 Rs. per 100 cubic feet, and the railway pays Rs. 55 per 100, which would certainly give them a large profit, as the carriage would be very small.

The following is the statement of receipts and expenditure :—

Year.	Expenditure.	Receipts.
	Rs. a. p.	Rs. a. p.
1893-94	1,778 11 8	3,361 5 4
1894-95	1,772 7 8	2,781 7 10
1895-96	1,818 3 4	4,191 1 10

INDUS CANALS DIVISION.

Trees in this Division are hand watered throughout the year.

There is only one small nursery, as the planting out of trees has practically been given up.

As was mentioned in the triennial report of 1893, four canal chauki compounds are now classified as plantations. There has been no change in the area recorded since last report.

There are no groves in the Division.

Only one mile has been added to the length of avenues, and that in 1893-94, while 1·86 miles of avenues disappeared, or had to be cut down, on account of erosion by river action.

The fear of river erosion prevents any satisfactory extension of avenues. These consist nearly entirely of *shísham*, though at the tails of canals, where water is scare, *kikar* trees are found. A few *Eucalyptus* trees are found in the Division.

The income has been increasing in a satisfactory manner. It has been found possible to use *shísham* from well-grown trees in various canal works. Fellings have come in useful for firewood.

Expenditure has been cut down, and is now chiefly limited to watering and tending the few trees planted out, and looking after the plantations in chauki compounds.

The income exceeded the expenditure in 1895-96, which is the first year such a result has been obtained. In 1893-94 income and expenditure nearly balanced, but there was a considerable falling-off of income in 1894-95.

MUZAFFARGARH CANALS DIVISION.

Nurseries.—During 1894-95 nurseries were started at the sites of all the canal rest-houses in the district. All, however, failed, due either to bad seed, or their not being properly tended, except that at Betwarián. The nurseries formerly existing at Adil shelter hut, Shujra and Vasandewála, have been discontinued. In the two former the trees have been planted out, while the last was destroyed by the floods of 1893.

Plantations.—The fruit-trees at Kálu and Sardár shelter huts, chiefly consisting of mangoes, are in a flourishing condition, but those at Vasandewála were destroyed by the floods of 1893. Plantations of *shísham* trees exist at Adil shelter hut and at Shujra and Betwarián rest-houses.

Groves.—No groves have yet been formed.

Avenues.—There is a good avenue of fair-sized *shísham* trees, about 5 miles in length, running due north from Shujra rest-house along the canal road. Otherwise avenues, as usually understood, do not exist. There are rows of trees along the Kinjar-Mahra *band* and along several canal banks.

The counting of trees having been discontinued, no figures can be given.

Income from arboriculture.—The figures represent the income derived from the sale of trees it was necessary to cut down, or of those which have died, or been blown down; also from sales of thinnings or loppings, and from sales of fruit.

Expenditure on arboriculture.—Represents cost of establishment kept up for the maintenance of plantations.

General remarks.—Owing to the low state of the *Zar-i-nagha* Fund in this district, due to heavy expenditure on flood protection works, no arboricultural works of any importance have been undertaken in recent years, and in the last year the plantation estimate was cut down to the lowest limit compatible with the maintenance of existing plantations. There are many excellent *shísham* trees in the district, for the growth of which the soil appears to be especially suited, and, in spite of the dryness of the climate, most trees when once established thrive well. Many miles of now treeless canals and embankments might, with proper attention and a moderate annual expenditure, have avenues or line trees established along them in a few years, were funds available.

KARNAL DIVISION, WESTERN JUMNA CANAL.

Avenues.—The trees which were planted on the right and left embankments at Tájewála were watered and maintained. Young *shísham* trees were planted on the left bank of the new supply channel to a distance of 1,400 feet. Trees on the Somb and Fattehgarh *bands* were maintained, as well as on Dádupur, Kharwán, Buriya and the Circular roads. The trees on the Main Canal from Indri to Munák were maintained.

Eucalyptus seedlings and date-palms have been successfully grown at Jáni and Munák, and are in a flourishing condition. One hundred and fifty-five *Eucalyptus* seedlings were planted out at Jáni during the year 1895-96, and are thriving, as are 100 date-palm seedlings.

Ornamental gardens were maintained at Dádupur, Radaur, Jandhera, Munák, Jáni, Muána and Jínd.

About 8 miles of trees were planted on the Main Line, of which 2 miles have failed.

About 40 miles of trees were planted on the Main Line, Sirsa Branch, of which about 12 miles failed, owing to the inferior soil and other causes. The *tún* and *shísham* trees are in good condition. New gardens have been laid out and stocked at Mandwal and Pegan.

On the Habri Rájbaha 7·5 miles were planted with trees. About 3 miles failed, owing to the bad soil.

A good number of fruit-trees of different kinds have been planted in the gardens at Barthal, Badhera, Kaul and Ror Májra chauki compounds, and are in a very flourishing condition everywhere, except at Kaul, where many of the trees have dried up.

These fruit-trees will bear fruit next year.

Nurseries.—Nurseries were established at Tájewála and Dádupur, which supplied plants to the new supply channel at Tájewála, Jaidhri plantation, &c.

During February and March, 1896, nurseries of *shísham* were established at Karnál, Ghogrípur, Munák and Jáni.

At Mandwál a portion of the Mandwál chauki compound has been laid out as a nursery and sown with *nim* and *tún* seed.

All the *shísham* seedlings at Barthal have been transplanted on the Sirsa Branch. The plants of *shísham* and *jáman* from the plantation nurseries at Badhera have mostly been planted out on the Sirsa Branch and the Habri Rájbaha. The remaining plants will be put out during next rains.

The nurseries of *jáman* and *shísham* at Kaul chauki have also been planted out in the Kaul chauki compound and on the banks of the Sirsa Branch.

Plantation.—Some trees were planted on the Circular and Kharwán roads Buriya Nali, and on the left bank of the Main Canal, and are doing well.

Trees were planted on the Main Line, Sirsa Branch, and Habri Rájbaha. A large area, along with the plantation, has been transferred to the Civil Authorities.

Financial results.—The sale-proceeds from canal plantations during the three years are shown below :—

	Rs.
1893-94	3,810
1894-95	555
1895-96	2,826
	7,191

against the following expenditure :—

1893-94	7,557
1894-95	5,035
1895-96	5,390
	17,982

The above figures show a deficit of Rs. 10,791, which is chiefly due to the Sirsa Branch, which is being planted with trees, and from which no receipts are derived as yet.

DELHI DIVISION, WESTERN JUMNA CANAL.

Nurseries.—During the years under review new nurseries have been established at different places throughout the Division, out of which a good number of trees has been transplanted to the canal banks and chauki compounds. The plants which remain in the nurseries are in good condition, and suitable for transplantation, with the exception of a few which have become too large: these will be left where they are.

No new nurseries have been started, as they are not required at present.

Plantations.—The *shísham* trees which were planted during 1892-93 on the right bank between R. D. 19,000 to 22,000, Delhi Branch, having failed, the same area was sown with *kikar*, and was doing well till recently, when a part was damaged by fire. Its recovery will depend on next rains.

Kikar seed, sown on the trench system, germinated, but the seedlings died off in the hot weather. In protected reaches self-sown seedlings have sprung up, and are in a flourishing condition.

A large quantity of fuel has been used for various purposes, so that, what with failures and clearances by felling, the increase in the area under plantations is practically *nil*.

Groves.—This item has altogether been done away with, in accordance with Chief Engineer's instructions, conveyed in his Circular No. 75-5451-I, dated 28th December, 1891.

Avenues.—Very fair progress has been made on the whole. There is a tendency to plant out trees which are too young, and failures are invariably due to this cause.

Income and expenditure.—The income exceeds considerably the expenditure. Income comes under four main heads—Grass, fruits, fuel and timber. The receipts for grass and fruits show no great increase. The receipts on account of fuel and timber show an increase of over Rs. 12,000. It is improbable that this increase will be maintained, as it is entirely due to the large quantity of fuel used on canal works, which are now approaching completion.

HISSAR DIVISION, WESTERN JUMNA CANAL.

Nurseries.—In the Narwána Sub-division 1·25 acres of *shisham* slips were planted out on canal banks during the three years, and the remaining 5 acres of nurseries are flourishing, and will be planted out during next rains. The four nurseries in the Gorakhpur Sub-division are in a thriving condition, and 4 acres were planted out during the last year, leaving 4 acres still to be planted out. In the Sirsa Sub-division there are also 4 acres to be planted out during the rains.

Plantations.—During the three years now reported on, 4 acres were stocked in the Sirsa Sub-division, 40 acres in Narwána and 81·75 acres in Gorakhpur. In Patiála they consist entirely of *kikar*, and are in a flourishing condition; this is also the case with the plantations in the Gorakhpur Sub-division. The plantations in the Sirsa Sub-division were commenced only in 1894.

Avenues.—In the Sirsa Sub-division 5 miles of avenue were planted during 1895-96, which are alive, but those planted on the Main Line have failed, owing to their being put in too small: there were 2 miles of them that failed thus. In the Gorakhpur Sub-division good progress was made, some 11·5 miles of avenue having been planted out during the triennial period, and the existing avenues in Narwána are in a splendid condition.

None of the new plantations have yet commenced to bring in any income, but the income from the Hansi Branch plantations has been very considerable, and amounts to Rs. 14·799 for the triennial period, as against a total expenditure in maintenance and extension of Rs. 2,749 for the same period.

FEROZEPORE DIVISION, SIRHIND CANAL.

Nurseries.—At the beginning of the triennial period the area under nurseries was 1·86 acres. An area of 4·93 acres was added, and 2·43 acres failed, leaving an area of 2·43 acres at the end of the period under nurseries.

Plantations.—The area under plantations at the beginning of the triennial period was 1984·59 acres; at the close of the three years under report the area had increased to 2275·97 acres, which gives an increase of 291·38 acres. Of this amount, 242·35 acres were added during the first year (1893-94). A plantation of 92 acres was sown in the Abohar, and 72·5 acres in the Bhatinda reservoirs. Of the balance, 77·85 acres, an area of 51·6 acres was planted out at miles 90 to 97 on the Abohar Branch, in the Asabutar Sub-division, 13·5 in Gholia, and the rest in the Alamwála Sub-division. The progress during the last two years has been small, as sufficient funds were not available, and the principal work done has been the maintenance of existing plantations. The figures in columns 5 and 6 for 1895-96 are principally transfers from one Sub-division to another, due to modifications in Sub-divisional charges. In the Bhatinda Sub-division an area of 18·3 acres was planted out at miles 86 to 88, and 90 of the Bhatinda Branch. The plantations consist principally of *shisham* and *kikar* trees, with fruit plantations at some of the canal chaukis.

Groves.—There are no groves. The area formerly shown under this head was transferred to plantations in 1889-90.

Avenues.—There has been very little progress in the extension of avenues. The length shown at the beginning of the triennial period was 58·20 miles, but this was wrong, and has now been corrected by making necessary additions in column 5. The actual length at the beginning of the triennial period ought to have been shown as 58·20 + 96·57 + 1·60 for 1893-94 = 156·37 miles. To this a length of 2·88 miles has been added in Gholia Sub-division, ·6 in Asabutar and 1 in Bhatinda, bringing up the total at the end of the period to 159·45 miles, after making the deductions shown in column No. 5.

Income and expenditure.—The total income for the three years has been Rs. 9,730, giving an annual average of Rs. 3,243, against 2,602 for the previous years. The income has been derived principally from grazing leases. The trees are still young, and, besides, there is little or no demand for fuel in the district.

The expenditure for the three years has been Rs. 30,014, which gives an annual average of Rs. 10,005, against Rs. 11,987 for the three previous years. The excess of expenditure over income is Rs. 6,762, against Rs. 9,384 in the previous triennial period. It will, therefore, be seen that there is a marked decrease in the excess of expenditure over income.

LUDHIANA DIVISION, SIRHIND CANAL.

Nurseries.—During the period under review there is a decrease of 4·13 acres under this head on the Main Line and Combined Branch. On the Abohar and Bhatinda Branches there was little or no increase, and the areas are more or less stationary. There are now 13·38 acres occupied as nurseries in the Division, while in the previous three years the figures stood at 17·51.

The alternate abandonment and starting of nurseries on the two latter branches have about counterbalanced in the above period. On the Main Line such areas are not much in demand, the carriage of plants from one site by water being both feasible and cheap.

Plantations.—There was a total increase of 101·53 acres during the period on Main Line, Abohar and Bhatinda Branches. This added to previous years' figures gives a total area of 4,540·05 acres under plantations, out of 6,608 acres available for that purpose.

The progress shown on the Main Line is 50·0 acres, and that part of the canal is now fairly stocked with trees, in all places where the soil allows of their being easily matured.

The Combined Branch is a short channel and not well suited for extensive plantations. There are a fair number of trees, which grow slowly, the soil being unfavorable.

On the Abohar Branch an increase of 36·95 acres is recorded : the operations are mostly confined to silting reaches, where the results are generally satisfactory.

The Bhatinda Branch passes through the "very dry" and "arid" zones, and the cultivation of trees on it is consequently precarious, unless canal water is easily obtainable. Progress is slow in the lower reaches, yet steady, and the increase reported for 1893—96 of 14·52 acres is satisfactory.

On both of the two latter branches felling and thinning operations have to be suspended for the present, and no revenue is likely to be obtained for some years from these sources.

Groves.—There are none in the Division.

Avenues.—The total length of avenue last reported was 191·65 miles, to which the period under review has added 26·50 miles, making a total of 218·15 miles so protected. The increase is distributed as follows :—

	Miles.
Main Line	12
Combined Branch	2
Abohar Branch	7·10
Bhatinda Branch	5·40
	26·50

Mangoes and *jáman* are the varieties mostly planted on the Main Line, *jáman* and *shisham* on the others. The avenues are generally watered by stream wheels, or from the notches of falls, and are in consequence successful and promising.

Receipts and expenditure.—The receipts and expenditure are best shown together for the sake of comparison. The table below gives details for each of the three years :—

Year.	Receipts.	Expenditure.	Profit.
	Rs.	Rs.	Rs.
1893-94	15,327	6,510	8,817
1894-95	8,263	7,018	1,245
1895-96	13,214	7,317	5,897
Total	36,804	20,845	15,959
Average	12,268	6,948	5,320

The average profit thus works out to Rs. 5,320 per year, compared with Rs. 8,800 of the previous triennial period. The decrease is attributable to slacker demand for fuel (for manufacture of building materials, &c.), and to the non-inclusion of grazing receipts in the year 1894-95, the dates of sale having been altered from March to April.

Of the receipts, Rs. 13,401 represent fuel cut from plantations; Rs. 23,132 represent canal produce, grass, &c.; Rs. 271 represent sale of dead trees, &c.

The receipts and expenditure are given below by Branches :—

Branch.	Receipts.	Expenditure.	Profit.
	Rs.	Rs.	Rs.
Main Line	19,014	6,430	12,584
Combined Branch	186	376	—190
Abohar	9,082	5,049	4,033
Bhatinda	7,922	8,990	—1,068
Total	36,804	20,845	15,959
Average	12,268	6,948	5,320

The Main Line and Abohar Branch contribute solely to the revenue derived, while the Combined Branch and Bhatinda Branch are, for reasons given above, unable to show steady profits.

PATIALA DIVISION, SIRHIND CANAL.

Nurseries.—The area under nurseries has somewhat decreased, from 7·79 to 6·78 acres, owing to 1·27 acres having been transferred to plantations. A small addition was made in favourable spots in 1895-96. The stock of young plants was considerably reduced in the two previous years by being sent out to avenues and plantations, but fresh sowings have been made, which will make up for the seedlings transplanted. The keeping up of a full stock of young seedlings, suitable for transplanting, will receive very careful attention in the future, as on this depend the completion of new avenues, and also the filling up of gaps, where trees have died in old avenues.

Plantations.—The area taken up for plantations has increased from 3,881·88 to 3,918·48 acres, *i.e.*, by 53·07 acres, owing to the inclusion of 51·80 acres of levelled silt reaches, and 1·27 acres transferred from nurseries. The soil of the levelled silt reaches is most favorable for the raising of plantations, and the new areas have been lately sown with *shisham* and *kikar*, and will be carefully maintained.

The total stocked area of plantations in the Division now amounts to 2,538·19 acres, as against 2,485·12 at the beginning of the period under review.

As a rule the plantations are in good order. This is especially so on the First Feeder and the Kotla Branch, where the *shisham* plantations are doing excellently.

On the Ghaggar Branch, towards the tail, there are fine stocks of *kikar*, which are, however, getting somewhat damaged by the inroads of an insect, which is difficult to discover. Large healthy trees in the midst of a plantation are found to die without any ostensible cause, but if the bark be removed, the burrowings of an insect will be found on the surface of the wood. Cutting down of affected trees has been occasionally resorted to, to prevent further spread of the evil.

There is, however, at present no local demand for the timber, even as fuel, but on the completion of the Southern Punjab Railway, a demand will probably spring up, when the dead trees may be disposed of quickly and at considerable profit to the canal.

On the Second Feeder the plantations are still of small growth, but particular attention is being directed to this portion of the canal.

On the Choa Branch the land is very sandy, and, generally speaking, the level of the canal water is much below the ground surface; hence plantations are not laid out on this Branch, only avenues being maintained.

It may be mentioned that at the Kot Bakhtu Canal chauki, at the tail of the Kotla Branch, there is a very successful grove of Arabian date-palms. These have been grown from seeds, and are doing very well on the whole, some of the trees having attained a height of 7 or 8 feet, and are already flowering.

Groves.—There are no groves now in this Division.

Avenues.—The total length of avenues has increased during the period under review from 114·69 to 128·64 miles, or by 13·95 miles. A portion of this increase is, however, only nominal, as there appears to have been an error in the actual number of miles previously shown under the Ghaggar Branch, which is now rectified.

The avenues have, on the whole, done well, especially on the First Feeder and the Kotla Branch, where they have been extremely well cared for. There were 2·70 miles of failures, of which 2·00 miles were on the Second Feeder and Ghaggar Branch, due to the dryness of last year, and less care in the selection of plants and planting operations. Special attention is being directed to the completion of avenues on the Second and Third Feeders and Ghaggar Branch, which are the most backward parts of the Division.

Income.—The gross profits for the last three years, as compared with those of the previous triennium, are as follows:—

	Rs.
Three years ending 1892-93	14,651
Ditto 1895-96	9,691

This shows a falling-off of Rs. 4,960, which is chiefly due to very much less fuel having being sold for brick-burning purposes during the past three years. The actual figures on the item of plantations (which are the source of the fuel) are Rs. 5,677 and Rs. 1,794 for the two periods, respectively.

The receipts under miscellaneous (chiefly grass) also show a falling-off, due, perhaps, to the fact that the previous period included the dry years 1890-91 and 1891-92, when grass was very valuable and realised high prices.

Expenditure.—There has been a great decrease in expenditure, as anticipated in the previous triennial report, as will be seen from the following figures:—

	Rs.
Period ending 1892-93	40,691
Ditto 1895-96	22,576
Or less by ...	18,115

The principal sub-heads in which there has been a decrease are nurseries, and groves and avenues. The operations are now on a smaller scale, and maintenance of existing plantations and avenues account for most of the expenditure.

General remarks.—Although a large proportion of the land attached to the canal is well stocked with plantations, and more than half the total length of the various channels is lined with avenues, arboricultural operations must go on for some years longer, to maintain the young plantations and avenues, to plant out fresh areas of bare land, where practicable, and to complete the avenues throughout the entire length of the canal, where the soil is at all suitable.

CHENAB CIRCLE.

Rainfall.—Generally, the three years were successively very rainy, rainy and very dry.

Nurseries.—These have received little attention, as the system of sowing out in trenches is found to answer best.

Avenues.—These have been largely extended in the Swát River Canal Division, and in the 1st and 2nd Divisions, Chenáb Canal. As just stated, the system which costs least, and answers best, is to sow the seed (usually *shísham*) on the margin of small trenches, down which water is run. Under this system the young trees are found to attain a height of from 2 feet to 8 feet, or even 10 feet, in one year, the average being 4 feet to 5 feet. This system has been most successful on the Swát River and Chenáb Canals.

Groves.—The statement of these is blank.

Plantations.—These have not been extended very largely, but increased attention is now being given to the matter. The intensely dry character of the soil in the Chenáb *Bár* makes it impossible to grow plantations without a copious water-supply.

Lyallpur Station.—A good deal has been done during the past year in laying out avenues in Lyallpur Station, and these have all been sown on the trench system.

Income and expenditure.—As the establishing of avenues on the Swát River and Chenáb Canal has only been commenced in recent years, expenditure must exceed income for many years to come.

Shahpur Canal Division.—This Division has only been constituted for two years, and the tabular statements relating to it are only given for the years 1894-95 and 1895-96.

SHAHPUR INUNDATION CANALS DIVISION.

Nurseries.—Nil.

Plantations.—No areas are available for plantations.

Groves.—There are no groves in this Division.

Avenues.—There are no avennes in this Division, properly so-called; those shown in the statement are common country trees, spontaneously grown, which, for the most part, line the banks of the canals. They consist almost entirely of *kikar*, tamarisk, *shisham*, with a few others.

Income.—The income is derived principally from sale of fallen and dry trees, and trees cut down within 10 feet of the edge of the channel; sale of grass on canal banks for grazing purposes; and *munj* and *sarkanda* reeds, which grow spontaneously.

Expenditure.—The expenditure incurred has been almost entirely on maintaining and repairing the existing avenues. There is no record of such expenditure during the years prior to 1895-96.

This is the first Triennial Report of this Canal Division. As it has been in existence only two years, the report shows only figures for the two years 1894-95 and 1895-96. Before then the canals were under district management, and any report on their trees would have been included in the General District Report.

ROHTAK INDEPENDENT SUB-DIVISION, WESTERN JUMNA CANAL.

This Sub-division was sanctioned with effect from 1st February, 1895, about which date the Bhiwáni Rájbaha system was commenced.

Up to the 31st March, 1896, no arboriculture operations were undertaken on the Bhiwáni Rájbaha system, the main channels of which are shown on the accompanying skeleton plan in blue lines.

These channels have now been completed, and it is proposed during 1896-97 to start nurseries at Rindháwa, Bainsi and Chang chaukís, with a view to putting down line trees along the toe of outer slopes of the banks of the Bhiwáni Rájbaha, and of the Kanhaur, Maham and Rewári Branches.

A small space in the compound of the new Sub-Divisional quarters at Rohtak may also be set aside for a plantation during 1896. The returns for the triennial period ending 31st March, 1896, are blank.

PROVINCIAL DIVISIONS.

HAZARA PROVINCIAL DIVISION.

Nurseries.—Practically, the progress under this head has been *nil*; the total area taken up for nurseries during the three years under report throughout the Division was 2·57 acres, and 2·90 acres were abandoned.

This is chiefly due to the fact that the roads are stocked with trees, and there is very litte demand for young trees.

Avenues.—Good progress has been made in the maintenance of roadside trees, which are mostly in a flourishing condition. The failures occurred in places where no constant watch could be kept, the young trees being destroyed by sheep, goats, camels, &c.

Income.—During the period under report the total income amounted to Rs. 2,803, which represents the sale of live and dead trees, loppings, grass, &c.

Expenditure.—The gross expenditure on arboriculture during the period under review amounted to Rs. 17,439.

The net expenditure thus amounts to Rs. 14,636.

RAWALPINDI PROVINCIAL DIVISION.

Rawalpindi Sub-division.

Rainfall.—The rainfall has been as follows:—

	Inches
1893-94	54·47
1894-95	38·37
1895-96	27·95

The past year has been excessively dry.

For arboricultural purposes the Ráwalpindi Sub-division comprises 95 miles of the Lahore and Pesháwar road, 14 miles of the Ráwalpindi-Barracow road, ½ mile of Lawrencepur Link road, 4·16 miles of Hazro-Hatti road, ½ mile of Gujar Khan and Mandra Link roads, and 67 miles of Turnoul and Khushálgarh road.

On these roads there are three distinct kinds of arboriculture, *viz.*, nurseries, avenues and groves.

Nurseries.—The nurseries are nearly all located in the compounds of the rest-houses. During the last three years, ·37 acre were planted and ·18 acre were used up in forming groves and avenues. The difference, ·19 acre, represents the addition to nurseries. All the young plants in these nurseries are flourishing, and there will be a sufficient stock in hand for establishing about 10 miles of avenues next year, if funds can be provided.

Avenues.—On the trunk roads trees to form avenues have been planted, outside the formation width, parallel to the road.

During the three years under review 7·51 miles of trees were planted on roads in the Ráwalpindi district. Nearly all these young trees were obtained from the nurseries in rest-house compounds.

About 3·32 miles of trees failed, owing to excessive drought, during the last two years. The progress, therefore, on avenues during these three years shows an increase of only 4·19 miles.

Groves.—Groves are established at intervals of about three miles on the Lahore and Peshâwar road and Ráwalpindi-Baracow road, where the soil is suitable.

There has been an addition of 8·52 acres to the groves on the Lahore and Peshâwar road during the past three years. In 1893-94 19·28 acres of groves were used up as follows: destroyed by floods 10·5 acres, and transferred to Military Department 8·78 acres. During 1895-96, 1·30 acres have failed, owing to excessive drought.

Therefore, on the whole, there has been a loss of 20·58 — 8·52 = 12·06 acres, of which 8·78 acres are not a loss, but a transfer.

Expenditure and revenue.—During the past three years Rs. 8,168 have been spent on arboricultural operations in this district, and the revenue realised amounts to Rs. 5,365: difference Rs. 2,803.

Jhelum Sub-division.

Rainfall.—The year 1895-96 was unusually dry, the total rainfall being only 17·70 inches, compared with 50·49 inches in 1893-94 and 42·72 inches in 1894-95.

Avenues.—During 1893-94 arboricultural operations were confined to replacing young trees, here and there on the roadside, that had died or been destroyed. During 1894-95 about 2 miles of the Lahore and Peshâwar road were provided with double lines of avenues of young *shisham* trees, but hardly anything could be done in the last year, owing to the unusual drought.

Over 22 miles of the Lahore and Peshâwar road are now stocked with avenues.

Groves.—The total area of groves on the Lahore and Peshâwar road is, as previously reported, 91·90 acres, of which about 76·81 acres are now fully stocked with trees. There are blanks in the groves, which require filling in with young trees. This work can be taken in hand, only as funds become available.

Nurseries.—The roadside nurseries are thriving, and are sufficient to meet the ordinary requirements of the road.

Revenue.—The revenue realised by the sale of grass and dead trees during the past three years amounts to Rs. 2,509, against Rs. 1,865 in the previous three years, showing an increase of nearly Rs. 600.

Expenditure.—The expenditure incurred on arboricultural operations during the three years under review amounts to Rs. 5,426, against Rs. 8,457 in the previous three years, showing a reduction of over Rs. 3,000.

The expenditure has exceeded the revenue by Rs. 2,917.

KOHAT PROVINCIAL DIVISION.

Nurseries.—Attempts have been made during the last three years to plant nurseries at various places along the road. There has been fair success, but the scarcity of water and the general sterility of the soil are great drawbacks.

Plantations.—There are none in the Division.

Groves.—These have thriven fairly well during the past three years, but bad soil and want of water will always militate against any marked success.

Avenues.—Trees in avenues are progressing fairly well, but slowly. In a frontier Division like Kohât it is difficult to make much progress. Trans-border men seem to consider that the trees are planted for the use of their animals, and much damage is done yearly by camels, &c., browsing on the roadside trees. Want of water and bad soil also preclude any great success. *Shisham*, willow, mulberry, *kikar* and *pípal* trees have been planted, and the mulberry seems to thrive best of the lot.

Expenditure and income.—The expenditure during the last three years has been Rs. 7,084-7-1, while the income has only been Rs. 43-3-0. All the trees in the Division are young, and no proceeds can be obtained, except for some small amount of loppings and a little grass.

It will be very many years before any substantial income is received. The soil all over the district is very poor, and water is scarce.

GUJRANWALA PROVINCIAL DIVISION.

Gujranwala Sub-division.

The only roads under the Public Works Department in the Gujránwála district on which trees are planted are—

Lahore and Peshâwar road from mile 21½ to 62½ in Gujránwála district, including two link roads, one leading from mile 29 on the Grand Trunk road to Kámoki railway station, and the other from mile 51 near Ghakkar to the railway station, about 1½ miles in length.

The Wazírabad and Siálkot road in Gujránwála district, 5¼ miles.

The maps attached to this report show the avenues and groves that are fully or partially planted with trees. Lots of young trees were planted along the outer edges of the berms of roads, but the great number of them was eaten up by white ants. The remaining plants were taken proper care of, and have generally grown satisfactorily. A list of the trees standing along the roadsides is annexed. The plants are *shísham, kikar,* and *sharín.* No effort was made to plant more trees, owing to the want of sufficient establishment.

The trees in nurseries at Wazírabad and Ghakkar, transplanted on the roadside, were given up, owing to want of funds and the bad soil.

Along the Wazírabad and Siálkot road no efforts were made to plant more trees, or to form nurseries, owing to want of sufficient funds. Only those which were formerly planted have been taken care of.

Gujrat Sub-division.

The chief roads and places suitable for arboricultural operations in the Gujrát Sub-division were given in the last triennial report.

I.—*Grand Trunk road.*—The avenues, groves and nurseries on this road are shown in the tracing attached to this report.

The road is planted partly with trees and partly with young plants.

The trees are mostly *kikar,* but there are also *shísham* trees and young plants, which have been put out along the outer edge of the berms, on both sides of the metalled portion. Every year young plants of *shísham* are transplanted to roadsides, and watered, protected and taken care of by the *málís* employed for this purpose.

In 1893-94 and 1894-95 250 *shísham* trees were planted out on the roadside at mile 66, and in 1894-95 and 1895-96 at miles 77, 83, 85 and 86. They were all watered, protected and taken care of. *Shísham* trees at miles 74 and 86 are transferred from list of young plants to stock.

Some failures occurred, where very young and tender plants had been planted out, but the dead ones were again replaced by new ones, except at mile 92, where the ground is unfit for the proper growth of *shísham* trees.

It has been found by experience that the transplantation of plants, above 4 feet in height, is very successful, and that their progress is very satisfactory; whereas small plants, 1 or 2 feet high, require a long time to establish themselves, and a great deal of money is uselessly spent. Besides, there is a great chance of their dying, or being damaged.

II.—*Branch road.*—On this road there are avenues of *shísham* trees, which are protected and taken care of. They are almost all mature, and whenever any of them die, they are replaced by new ones from the nurseries.

III.—On roads, leading to rest-houses, there are partly grown-up trees, and partly young plants, which are taken care of by the road coolies.

IV.—*Bhimber band.*—On this *band* at first there were no trees at all, but gradually reeds, *farásh* and willow trees were planted, and then *shísham, pípal, tún* and *bér* trees, which have grown well. On the Grand Trunk road there are no nurseries, except in the compounds of Gujrát and Lála Músa rest-houses, which are enlarged every year by sowing new seed, but, at the same time, young plants are removed from them to roadsides. There are no ornamental gardens in this Sub-division. In Gujrát and Kathála rest-house there are some fruit trees, which are taken care of.

JULLUNDUR PROVINCIAL DIVISION.

Rainfall.—It will be seen from Statement No. I that the rainfall has been insufficient during the years under report in the Jullundur, Hoshiárpur and Kángra districts of this Division, being, respectively, 16·40, 29·12 and 124·83 inches.

The establishment employed to water the roadside trees had, in consequence, to be temporarily increased.

Nurseries.—There are four nurseries in this Division, with an aggregate area of 1·881 acres. This is sufficient for the requirements of the Division.

Plantations.—There are no plantations in this Division.

Groves.—There were 5·25 acres under groves at the beginning of the year, and no changes of area have taken place.

Avenues.—The following are the roads in this Division :—

I.—Grand Trunk road from Phillour to left bank of Beás, 50·37 miles, of which 50 miles are suitable for avenues.

II.—Jullundur-Hoshiárpur road, 25 miles, of which 24 miles are suitable for avenues.

III.—Hoshiárpur-Dharamsála road, 80 miles. This road runs through the hills for the most part, and only 5·58 miles are suitable for avenues (*vide* Statement No. V).

IV.—Kángra Valley cart-road (including branch road), 67 miles. This road also runs through the hills, but, as a rule, through a better country than the foregoing one.

There are 65 miles suitable for avenues, and of these 18·459 are planted.

Income.—The income from the several sub-heads of arboriculture, realised and credited to Government as Provincial receipts during the year, amounted to Rs. 7,779, against Rs. 1,883 and Rs. 6,476 in the two preceding years. The increase in income during the year is due to better arrangements made for disposing of the produce.

Expenditure.—The total expenditure on arboriculture during the year amounts to Rs. 1,492, as compared with Rs. 1,857 and Rs. 1,961 in the two preceding years.

INDEPENDENT EXECUTIVE CHARGE, FEROZEPORE.

Rainfall.—The rainfall during the three years is shown in Statement No. I. It will be seen that the rainfall during the year under report has been insufficient both in the Ferozepore and Ludhiána districts.

2. The rainfall has been obtained from the office of the Deputy Commissioners, Ferozepore and Ludhiána.

Nurseries.—There are five nurseries in this charge, having an aggregate area of 1·22 acres (*vide* Statement No. II). These nurseries are sufficient for the requirements of both the Ludhiána and Ferozepore Sub-divisions in this charge.

Plantations.—There are no plantations in this charge.

Groves.—There were 496·41 acres under groves at the beginning of the year. The amount is still the same.

Avenues.—The following are the roads in this charge :—

I.—Grand Trunk road from Khanna to Sutlej, mile 162 to 195 = 37 miles, the whole of which is suitable for avenues.

II.—Ludhiána and Ferozepore road section from Ludhiána to Jagráon, mile 191 to 219 = 28 miles, the whole of which is suitable for avenues. Ludhiána-Ferozepore road section from mile 220 to 273 = 53 miles, of which only 32·83 miles are suitable for avenues.

III.—Ferozepore station roads, 2·26 miles. The total length of these roads, 2·26 miles, is suitable for avenues.

Income.—The income from the several sub-heads, realised and credited to Government as Provincial receipts during the year, amounted to Rs. 2,002, against Rs. 1,622 and Rs. 4,617 in the preceding years.

Expenditure.—The total expenditure on the several sub-heads of arboriculture in this charge during the year amounts to Rs. 1,507, as compared with Rs. 2,133 and Rs. 2,586 in the two preceding years.

SIMLA PROVINCIAL DIVISION.

Rainfall.—The actual rainfall of last official year is less by 33·20 inches than that of the preceding year, but it exceeds that of 1893-94 by 1·15 inches. The rainfall has been taken from the *Punjab Gazette.*

Nurseries.—There is no regular nursery planting in this Division.

Plantations and groves.—There are no regular plantations or groves in this Division

About 1,300 trees which were planted before 1893-94 exist on the hillsides above the Army Head-quarters and the Military Secretariat offices at Simla, but these do not increase the area of such groves. Besides, these trees would come within the Municipal limits of Simla, a report on which is presumably submitted by the Deputy Commissioner. Before 1893-94 some sites of dismantled houses on Prospect Hill were planted out with shrubs, and the place made into a pleasure-ground.

Avenues.—There are no regular arboriculture operations in the Simla Provincial Division. The Hindustán-Thibet and the Kálka-Simla roads pass through Native States. The only portion over which the Executive Engineer is supposed to have any control is a strip, 100 feet wide, on each side of the road, but he has no control at all over the planting of this.

Every endeavour is being made to encourage young trees to grow at the following places:—

1. "Barnes Court."
2. "Ellerslie."
3. "Benmore."
4. "Winterfield."
5. Koti landslips, miles 6th, 7th and 8th, Kálka-Simla cart-road.
6. "Viceregal Lodge."
7. "Prospect Hill."
8. Foreign Office.
9. Army Head-quarters.
10. "Snowdon Estate."
11. "The Retreat" at Mashobra.
12. Branch cart-road to railway station, Kálka.

Income.—The Ornamental gardens, under the charge of this Division, are situated at the places detailed in Statement No. VI.

There has been no income from arboricultural operations during the year under report.

Expenditure.—Rupees 6,053 is the total expenditure incurred as below:—

	1893-94.	1894-95.	1895-96.
	Rs.	Rs. a. p.	Rs. a. p.
Maintenance of garden, "Barnes Court ...	333	337 12 6	338 10 9
Do. do. "Ellerslie"	212	151 12 0	119 0 0
Do. do. "Benmore"	211	201 9 3	128 13 0
Do. do. "Winterfield	96	96 0 0	...
Do. do. "Viceregal Lodge" ...	3,058	3,014 4 1	3,000 12 4
Heating the Green House at "Viceregal Lodge"	...	...	300 1 0
Rebuilding a retaining wall in Circular garden at "Viceregal Lodge"	...	...	189 3 2
Annual repairs to covered Tennis Court at "Viceregal Lodge"	...	...	200 9 9
Converting the gravel Tennis Court at "The Retreat," at Mashobra, into a grass plot ...	...	...	190 6 8
Maintenance of garden on Prospect Hill ...	327	303 7 2	249 7 0
Do. do. at Foreign Office	96	96 0 0	...
Do. do. „ Army Head-quarters ...	180	180 0 0	...
Excavation to form a flower garden at "Snowdon"	...	195 3 0	...
Relaying conservatory roof at "Snowdon" ..	...	...	152 4 0
Maintenance of garden at "Snowdon"	...	...	330 0 0
Planting trees along sides of branch cart-road to railway station, Kálka	...	...	*233 11 9
Maintenance of 7th mile landslip, Kálka-Simla cart-road	...	...	620 0 0
Total	4,518	4,576 0 0	6,053 0 0

Map of district.—As no regular arboricultural operations are going on in this Division, the map, called for in paragraph 11 of the "Instructions" for the preparation of triennial reports and annual statements, is not necessary.

* Estimate was sanctioned for Rs. 330, and the total expenditure incurred amounted to Rs. 333-11-9, which included a sum of Rs. 100, being cost of repairs to the road; hence the correct expenditure incurred in tree-planting, *viz.*, Rs. 233-11-9, has been accounted for.

AMBALA PROVINCIAL DIVISION.

Nurseries.—There were no nurseries in this Division, except during the year 1895-96, when the total area was 1·33 acres, of which ·26 acre failed for want of rain, and 0·11 acre were transplanted, leaving a balance of ·96 acre at the end of the year.

Plantations and groves.—There are no plantations or groves in this Division.

Grand Trunk road.—From mile 39 to 161 = 123 miles. This road runs through the Karnál and Ambala districts.

The following miles of this road, being within the boundary of the Ambala Cantonment, are under the charge of the Executive Engineer, Ambala Military Works Division: mile 119=2,337 running feet; mile 120; mile 121; mile 122; mile 123 = 1,251 running feet; total 3 miles, 3,588 running feet, or 3·68 miles altogether.

Patches aggregating 4·54 miles failed in the Karnál district, owing to want of rain.

Ambala and Kálka road.—This road (from 4th to 38th mile) is 34·63 miles long, and the length available for avenues is 33·97 miles; the aggregate width of the Ghaggar river, and the Jhujjra and Sukhna crossings, which cross this road at miles 21½, 36½ and 82½, respectively, is=0·66 miles.

Shahábadand Jagádhri road.—The length of this road from Shahábad to the west bank of the Jumna river, near Jagádhri, is 33·50 miles. This includes 10½ miles of the Adhowa and Kharindwa Railway feeder road. The railway station for Shahábad is called "Kharindwa." The length suitable of avenue is the entire length of road, *i.e.*, 33·50 miles, thus—

	Miles.
Kharindwa to Adhowa Railway feeder road	10·50
Adhowa to Jagádhri (west bank of Jumna river)	23·00
Total	33·50

New approach roads, Karnál district.—The length of approach roads in the Karnál district, suitable of avenue, is 3 26 miles, one mile of which was planted during 1895-96.

Income.—An income of Rs. 7,831 was realised, against Rs. 5,832 and Rs. 4,891 in the two preceding years, on account of the sale-proceeds of dead and fallen trees, grass and fruits of the roads under charge of this Division.

The income from grass would have been greater, had not the grass, along the Grand Trunk road from mile 108 to 133, and Umballa and Kálka road from mile 4th to 14th, been given free to the 10th Bengal Lancers and 18th Hussars and Royal Artillery by order of Government in the Public Works Department.

Expenditure.—The amount of Rs. 1,541, against Rs. 1,892 and Rs. 2,316 in the two previous years, was expended on the maintenance of avenues during 1895-96. Thus the net income during the triennial period amounts to Rs. 12,805.

DELHI PROVINCIAL DIVISION.

Nurseries.—There are no nurseries in this Division. The reason for their absence is that young trees of a size suitable for plantation on roadsides can be had almost everywhere at a reasonable cost, and it is considered more expensive to grow them in nurseries.

Plantations and groves.—There is no plantation in this Division. 4·84 acres of groves, transferred from the Sirsa Municipality to the charge of this Department in 1894-95, still exists in Sirsa Church garden.

Avenues.—The lengths of avenues on the roads in this Division are shown below:—

DELHI DISTRICT.

Grand Trunk Road.

	Miles.
Under municipal charge	1·50
Unfit for avenues	0·50
Avenues	18·47
Unplanted	17·53
Total	38·00

Delhi-Sirsa Road.

	Miles.
Under municipal charge	1·00
Unfit for avenues	1·05
Avenues	13·48
Unplanted	0·47
Total	16·00

Delhi-Muthra Road.

Avenues	21·86
Unfit for plantation	1·00
Unplanted	5·14
Total	28·00

Delhi-Gurgáon Road.

Under municipal charge	1·50
Unfit for avenues	1·75
Avenues	11·85
Unplanted	1·65
Total	16·75

ROHTAK DISTRICT.

Delhi-Sirsa Road.

Unfit for avenues	0·50
Avenues	20·50
Unplanted	7·00
Total	28·00

Rohtak-Bhiwáni Road.

Unfit for avenues	1·00
Avenues	7·00
Unplanted	11·00
Total	19·00

The lengths shown as unfit for avenues are those where the road passes through villages or towns, and there is no room for an avenue.

The lengths planted during the past three years were—

	Miles.
Grand Trunk road	1·25
Muthra road	1·20
Rohtak road	0·40
Gurgáon road	0·30
Total	3·15

On the other hand, the lengths which failed were as below :—

Grand Trunk road	1·10
Muthra road	1·10
Rohtak road	0·40
Gurgáon road	0·18
Total	2·78

The failures were mainly due to deficient rainfall.

Income.—The average income from arboriculture for the past three years was Rs. 1,143, that for the year under report, Rs. 851. The decrease is due to the comparatively small income derived from groves and avenues.

Expenditure.—The average expenditure on arboriculture for the past three years was Rs. 1,700, and that for the year under report, Rs. 1,619.

DERA ISMAIL KHAN PROVINCIAL DIVISION.

Nurseries.—The area under seedlings at the end of 1892-93 was 1·70, and an area of 0·78 acre was added during the years under report; 1·95 acres were used up, and the plants on 0·12 were transplanted to avenues. Thus the total area of nurseries at the end of these three years amounts to 0·41.

Plantations.—At the beginning of 1893-94 the area under plantations was 157·42 acres, out of which 1·445 acres have failed; 0·209 acre was planted in the Bannu district during 1895-96, thus leaving an area of plantations at the end of 1895-96, in both districts, of 156·184 acres.

Groves.—At the beginning of the year 1893-94 the area of groves was only 10·36, and 6·96 acres (including 4·90 acres planted on Dera Ismail Khan-Tánk road, transferred from Deputy Commissioner) were added during the past three years; 0·86 acre has failed for want of water; this leaves 16·46 acres under groves in both districts at the end of 1895-96.

Avenues.—49·389 miles have been added during the past three years in the Dera Ismail Khan and Bannu districts, and 2·482 miles have failed. Of the miles added, 22·5 were on the Dera-Tánk road, transferred from Deputy Commissioner.

DERA GHAZI KHAN PROVINCIAL DIVISION.

Dera Ghazi Khan Sub-division.

Nurseries.—The only nursery in this Sub-division is at mile 5 of the Peshín road, the area of which is 0·05 acre; no more plants have been put in, and none taken out of, this nursery during 1894-96. In 1893-94 0·08 acre was planted for a grove on the Peshín road. No more plants have been put in, and no failures have occurred during 1894-95 and 1895-96.

The total area under cultivation for groves is 2·99 acres, the same as at the end of 1893-94.

Avenues.—Lengths of 2·05 and 1·75 miles were planted during 1893-94 and 1894-95, respectively. There have been no failures in the above years, but 0·87 mile was washed away by the river, which was in flood during 1895-96. During the year ending 31st March, 1896, 160 trees died from heat on all the roads in this Sub-division, and 44 trees were planted out. The same balance of avenues is shown as at the end of 1894-95.

Muzaffargarh Sub-division.

During the year under review 200 young *shísham* trees were planted out along the Dera Gházi Khan-Multan road, section Indus to Chenáb, which are all thriving. There were 4½ miles of young avenue trees on this road at the beginning of the year, of which a mile, near the Chenáb river, had to be abandoned, as the soil did not appear suitable for trees.

The other 3½ miles of trees are from Gházi Ghát to Miáni village. No young trees were destroyed by floods during the year. Forty-six dead trees were sold by public auction for Rs. 258-9-8, and fruit of palm trees for Rs. 5.

LAHORE PROVINCIAL DIVISION.

Nurseries.—The area under nurseries was 3·06 acres at the end of 1892-93, to which 7·41 acres were added, including ·59 acre received in transfer from the late Amritsar Division during the three years under report. But transplantation, failure, &c., affected the area to the extent of 5·71 acres, as detailed below:—

		Acres.
(*a*)	Transferred to roadside avenues	1·33
(*b*)	Do. to groves	3·42
(*c*)	Failure	0·22
(*d*)	Washed away by floods	0·14
(*e*)	Given up	0·60
		5·71

Plantations.—There are no plantations.

Groves.—At the commencement of the period 22·50 acres of groves were stocked with trees. During the three years 3·42 acres of nurseries, in which the plants had grown up, were transferred to groves, and 4 acres of groves failed, leaving a total area of 21·92 acres at the end of 1895-96.

Avenues.—The mileage of avenues on the different roads is as follows :—

		Miles.
(*a*)	Grand Trunk road, Beás to Attári	39·30
(*b*)	Do. Attári to Shálimár, including drainage cut near Shálimár	14·92
(*c*)	Lahore and Peshawar road	11·26
(*d*)	Ditto Ferozepore road	37·91
(*e*)	Ditto Shekhupura road	11·45
(*f*)	Ditto Civil station road	4·08
(*g*)	Kángra Valley cart-road	2·40
(*h*)	Pathánkot and Dalhousie road (portion)	4·02
	Total ...	125·34

The following figures will, however, show the actual length of avenues :—

	Length of road.				*Lines of trees.*	*Total length of single line.*
(*a*)	·75	×	1	=	·75	
	12·75	×	2	=	25·50	
	·25	×	3	=	·75	
	21·60	×	4	=	86·40	
	·75	×	5	=	3·75	
	3·20	×	6	=	19·20	
	39·30					136·35
(*b*)	5·99	×	2	=	11·98	
	2·93	×	3	=	8·79	
	5·00	×	4	=	20·00	
	1·00	×	6	=	6·00	
	14·92					46·77
(*c*)	1·07	×	1	=	1·07	
	6·14	×	2	=	12·28	
	1·58	×	3	=	4·74	
	2·00	×	4	=	8·00	
	·11	×	5	=	·55	
	·36	×	6	=	2·16	
	11·26					28·80
(*d*)	2·10	×	1	=	2·10	
	8·82	×	2	=	17·64	
	5·40	×	3	=	16·20	
	10·10	×	4	=	40·40	
	3·05	×	5	=	15·25	
	3·53	×	6	=	21·18	
	1·71	×	7	=	11·97	
	2·77	×	8	=	22·16	
	·43	×	9	=	3·87	
	37·91					150·77
(*e*)	3·57	×	1	=	3·57	
	4·50	×	2	=	9·00	
	2·00	×	3	=	6·00	
	1·00	×	4	=	4·00	
	·32	×	5	=	1·60	
	·06	×	6	=	·36	
	11·45					24·53
(*f*)	·22	×	1	=	·22	
	2·44	×	2	=	4·88	
	·42	×	3	=	1·26	
	.22	×	4	=	·88	
	·66	×	6	=	3·96	
	·12	×	7	=	·84	
	4·08					12·04
(*g*)	2·40	×	1	=	2·40	2·40
(*h*)	4·02	×		=	4·02	4·02
					Grand Total ...	405·68

The difference between the total length at the beginning of 1893-94 and that at end of 1895-96 is accounted for thus :—

	Miles.
Total length at beginning of 1893-94	91·62
Add length planted during the three years under review ...	74·99
	166·61
Deduct,—Failure during the three years under review ...	41·27
Total ...	125·34

Income.—The proceeds, realised from the sale of loppings, roadside grass, and dry and fallen trees, amounted to Rs. 19,643, or an average of Rs. 6,548, against that of Rs. 3,485 of the three previous years.

Expenditure.—The total expenditure on arboricultural operations during the three years under review is Rs. 14,495, or an average of Rs. 4,832.

Thus the net income amounts to Rs. 5,148, or Rs. 1,716 per annum.

MULTAN PROVINCIAL DIVISION.

Nurseries.—The area actually occupied by nurseries at the end of 1892-93 was 1·07 acres, but, by mistake, it was shown as 1·03 acres in the return for previous years. The omission was noticed and rectified in the return for 1893-94.

To meet the requirements of avenues on the first 3 miles of the Multan and Shere Shah road, an area of ·20 acre in the compound of the Public Works Department bungalow at Multan was converted into a nursery during 1893-94. The total area under nurseries at the end of 1895-96 amounts to 1·27 acres.

Avenues.—The length of different sections of road in the Division suitable for avenues at the end of 1892-93 was 31·30, which has been subsequently increased to 33·30 miles, owing to the transfer of the Jhang and Chah Bhereri Road to the Public Works Department in 1894-95. Previous to 1894-95 the road was maintained by the Deputy Commissioner, Jhang, from Provincial Funds.

The length fully stocked with trees at the end of 1892·93 was 23·27, which has been increased during the triennial period to 25·83 miles.

There was also a failure of ·75 mile on the Jhang and Chichawátni road during 1893-94, due to the hardness and sandy nature of the soil, which in places was largely affected by *reh*, and also to the long drought of 1893. The plants that died were very young and had not attained any size.

Income from arboriculture.—The income during the triennial period amounted to Rs. 44.

STATEMENT No. I.

Rainfall Return.

1	2	3	4	5	6	7	8	9
		Average Rainfall of past years.			Rainfall of year under report.			
District.	Year.	1st April to 30th September.	1st October to 31st March.	Total.	1st April to 30th September.	1st October to 31st March.	Total.	Remarks.
Muzaffargarh ...	1893-94	4·64	1·06	5·70	6·75	2·21	8·96	
	1894-95				2·93	1·85	4·78	
	1895-96				5·74	1·07	6·81	
Multan	1893-94	4·72	1·17	5·89	9·35	3·35	12·70	
	1894-95				4·64	1·93	6·57	
	1895-96				9·43	1·41	10·84	
Dera Gházi Khan	1893-94	6·55	1·99	8·54	6·95	3·60	10·55	
	1894-95				2·12	2·16	4·28	
	1895-96				5·74	1·71	7·45	
Dera Ismail Khan	1893-94	5·73	2·24	7·97	5·24	3·78	9·02	
	1894-95				8·36	4·65	13·01	
	1895-96				7·19	2·63	9·82	
Montgomery ...	1893-94	9·08	1·68	10·76	6·20	3·44	9·64	
	1894-95				5·58	2·26	7·84	
	1895-96				10·50	2·86	13·36	
Jhang	1893-94	6·82	1·79	8·61	6·95	3·70	10·65	
	1894-95				5·36	1·68	7·04	
	1895-96				11·48	2·85	14·33	
Bannu	1893-94	8·02	3·28	11·30	12·73	4·83	17·56	
	1894-95				9·98	3·78	13·76	
	1895-96				7·42	1·09	8·51	
Shahpur	1893-94	11·04	3·58	14·62	10·94	5·46	16·40	
	1894-95				13·71	4·28	17·99	
	1895-96				11·73	2·59	14·32	
Hissár	1893-94	14·18	2·37	16·55	16·60	4·05	20·65	
	1894-95				12·19	2·71	14·90	
	1895-96				10·68	0·22	10·90	
Ferozepore	1893-94	15·38	2·67	18·05	22·06	5·57	27·63	
	1894-95				23·95	3·40	27·35	
	1895-96				15·85	1·61	17·46	
Peshawar	1893-94	6·65	5·42	12·07	7·83	4·82	12·65	
	1894-95				6·13	8·78	14·91	
	1895-96				4·27	4·75	9·02	
Kohát	1893-94	11·99	6·31	18·30	14·42	5·09	19·51	
	1894-95				17·99	7·82	25·81	
	1895-96				6·91	4·37	11·28	
Rohtak	1893-94	17·93	2·26	20·19	42·82	3·89	46·71	
	1894-95				26·39	8·57	34·96	
	1895-96				11·00	1·75	12·75	
Lahore	1893-94	14·73	3·07	17·80	24·49	6·72	31·21	
	1894-95				16·12	3·45	19·57	
	1895-96				7·49	2·45	9·94	
Karnál	1893-94	25·70	4·02	29·72	33·51	7·93	41·44	
	1894-95				32·53	7·93	40·46	
	1895-96				31·60	0·93	32·53	
Jhelum	1893-94	16·35	5·49	21·84	39·38	11·11	50·49	
	1894-95				33·36	9·36	42·72	
	1895-96				16·67	2·50	19·17	
Gujránwála ...	1893-94	18·43	4·86	23·29	34·27	9·05	43·32	
	1894-95				21·86	6·56	28·42	
	1895-96				16·92	3·44	20·36	
Gurgáon	1893-94	23·65	2·39	26·04	26·55	3·54	30·09	
	1894-95				24·90	7·92	32·82	
	1895-96				18·38	1·82	20·20	

STATEMENT No. 1—*concluded.*

1	2	3	4	5	6	7	8	9
		Average Rainfall of past years.			Rainfall of year under report.			
District.	Year.	1st April to 30th September.	1st October to 31st March.	Total.	1st April to 30th September.	1st October to 31st March.	Total.	Remarks.
Amritsar	1893-94	21·33	4·52	25·85	27·55	7·05	34·60	
	1894-95				29·76	3·71	33·47	
	1895-96				12·59	2·31	15·90	
Delhi	1893-94	25·11	2·97	28·08	27·70	5·78	33·48	
	1894-95				29·74	10·48	40·22	
	1895-96				14·26	1·89	16·15	
Jalandhar	1893-94	23 50	4·53	28·03	40·35	8·14	48·49	
	1894-95				44·40	7·63	52·03	
	1895-96				14·24	2·16	16·40	
Ludhiána	1893-94	22 45	4·15	26·60	24 84	4·36	29 20	
	1894-95				30·75	7·79	38·54	
	1895-96				18·43	1·74	20·17	
Ráwalpindi ...	1893-94	22·32	8·87	31·19	42·45	12·02	54·47	
	1894-95				28·39	9·87	38 46	
	1895-96				12·72	4·72	17·44	
Gujrát	1893-94	10·83	6·52	26·35	32·23	10·32	42·55	
	1894-95				28·21	7·32	35·35	
	1895-96				18·34	1·27	19·61	
Gurdáspur	1893-94	25·52	5·43	30·05	47·37	11·94	59·31	
	1894-95				57·54	11·90	69·44	
	1895-96				34·73	3·44	38 17	
Ambála	1893-94	29·32	3·93	33·25	28·90	6·72	35·62	
	1894-95				33·82	9·10	42·92	
	1895-96				31·02	1·46	32·48	
Siálkot	1893-94	28·62	5 87	34·49	38 37	11·31	40·68	
	1894-95				27·65	6·43	34·08	
	1895-96				22·74	4·08	26·82	
Hoshiárpur... ...	1893-94	28·36	6·06	34·42	42·97	9·13	52·10	
	1894-95				35 82	16·10	51·02	
	1895-96				26·01	3·11	29·12	
Simla	1893-94	55·80	8·42	34·22	40·65	22·49	63·14	
	1894-95				76·33	21·16	97·49	
	1895-96				57·54	7·00	64·54	
Hazára	1893-94	30·02	14·82	44·84	60·09	22·27	82·36	
	1894-95				47·02	16·77	63·79	
	1895-96				31·28	10·62	41·90	
Kángra (Dharmsála).	1893-94	104·64	15·66	120·30	134·62	24·29	158·91	
	1894-95				168·70	30·65	199·35	
	1895-96				112·79	12·04	124·83	

STATEMENT No. II.

Progress Statement of Nurseries in the Districts for the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7
District.	Year.	Area under nurseries at beginning of the year.	Area added during the year.	Area given up or transferred to groves during the year.	Area remaining at end of the year.	Remarks.
		Acres.	*Acres.*	*Acres.*	*Acres.*	
Muzaffargarh	1893-94	1·25	...	...	1·25	
	1894-95	1·25	0·19	...	1·44	
	1895-96	1·44	0·07	...	1·51	
Multan	1893-94	45·18	0·41	0·95	44·64	
	1894-95	44·64	0·48	0·36	44·76	
	1895-96	44·76	0·38	0·50	44·64	
Dera Gházi Khan	1893-94	5·15	0·10	...	5·25	
	1894-95	5·25	...	...	5·25	
	1895-96	5·25	...	0·15	5·10	
Dera Ismail Khan	1893-94	10·48	0·25	...	10·73	
	1894-95	10·73	0·75	...	11·48	
	1895-96	11·48	0·30	...	11·78	
Montgomery	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95					
	1895-96					
Jhang	1893-94	0·27	0·14	0·07	0·34	
	1894-95	0·34	0·15	0·15	0·34	
	1895-96	0·34	17·00	0·04	17·30	
Bannu	1893-94	0·48	...	...	0·48	
	1894-95	0·48	0·15	0·48	0·15	
	1895-96	0·15	8·15	0·66	7·64	
Shahpur	1893-94	34·48	1·06	30·96	4·58	30·96 acres in column 5 include 30·41 acres transferred to groves.
	1894-95	4·58	0·76	0·81	4·53	
	1895-96	4·53	1·13	0·09	5·57	
Hissár	1893-94	287·79	...	...	287·79	Column 5 shows 163·24 acres transferred to groves.
	1894-95	287·79	...	163·24	124·55	
	1895-96	124·55	...	...	124·55	
Ferozepore	1893-94	3·25	1·00	2·75	1·50	
	1894-95	1·50	1·00	0·75	1·75	
	1895-96	1·75	1·50	2·00	1·25	
Peshawar	1893-94	11·04	2·21	0·25	13·00	
	1894-95	13·00	1·97	0·78	14·19	
	1895-96	14·19	59·01	0·38	72·82	
Kohát	1893-94	0·41	0·75	0·50	0·66	
	1894-95	0·66	0·25	0·46	0·45	
	1895-96	0·45	0·47	0·33	0·59	
Rohtak	1893-94	1·81	1·63	1·25	2·19	
	1894-95	2·19	...	...	2·19	
	1895-96	2·19	1·73	1·99	1·93	
Lahore	1893-94	7·26	1·00	...	8·26	
	1894-95	8·26	0·21	...	8·47	
	1895-96	8·47	...	...	8·47	
Lahore Municipality ...	1893-94	0·20	0·20	...	0·40	
	1894-95	0·40	...			
	1895-96	0·40	...			
Karnál	1893-94	8·53	...	...	8·53	
	1894-95					
	1895-96					
Jhelum	1893-94	7·07	0·81	...	7·88	
	1894-95	7·88	1·34	...	9·22	
	1895-96	9·22	0·18	..	9·40	
Gujránwála	1893-94	2·47	164·76	0·10	167·13	164·76 acres include 164·44 acres planted in the new colonies on the Chenáb Canal.
	1894-95	167·13	0·04	2·70	164·47	
	1895-96	164·47	...	0·03	164·44	

STATEMENT No. II—*continued.*

1	2	3	4	5	6	7
District.	Year.	Area under nurseries at beginning of the year.	Area added during the year.	Area given up or transferred to groves during the year.	Area remaining at end of the year.	Remarks.
		Acres.	*Acres.*	*Acres.*	*Acres.*	
Gurgáon	1893-94	3·11	...	0·48	2·63	
	1894-95	2·63	0·06	0·59	2·10	
	1895-96	2·10	...	...	2·10	
Amritsar	1893-94	39·37	...	...	39 37	
	1894-95	39·37	5·75	...	45·12	
	1895-96	45·12	1·00	1·00	45·12	
Amritsar Municipality ...	1893-94 1894-95 1895-96	7·34	...	...	7·34	
Delhi	1893-94	1·08	0·42	1·28	0·82	
	1894-95	0·82	0·03	...	0·85	
	1895-96	0·85	0·06	0·15	0·76	
Jalandhar	1893-94	15·66	...	1·25	14·41	Column 5 includes 1·25 acres transferred to groves.
	1894-95	14·41	...	5·45	8·96	Column 5 includes 5·45 acres transferred to groves.
	1895-96	8·96	...	...	8·96	
Ludhiána	1893-94	5·41	...	...	5·41	
	1894-95	5·41	...	1·70	3·71	
	1895-96	3·71	...	1·76	1·95	
Ráwalpindi	1893-94	11·21	...	...	11·21	
	1894-95	11·21	...	...	11·21	
	1895-96	11·21	3·00	...	14·21	
Do. Municipality ...	1893-94	1·56	...	...	1·56	
	1894-95	1·56	...	...	1·56	
	1895-96	1·56	0·12	...	1·68	
Gujrát	1893-94	3·05	0·42	1·69	1·78	
	1894-95	1·78	0·79	0·77	1·80	
	1895-96	1·80	1·76	1·35	2·21	
Do. Municipality	1895-96	...	0·02	0·02	...	
Gurdáspur	1893-94	5·71	0·58	2·44	3·85	
	1894-95	3·85	0·24	3·47	0·62	
	1895-96	0·62	2·60	...	3·22	
Ambála	1893-94	23·94	...	...	23·94	
	1894-95	23·94	...	21·97	1·97	
	1895-96	1·97	0·15	0·05	2·07	
Siálkot	1893-94	8·02	0·56	0·56	8·02	
	1894-95	8·02	0·36	1·94	6·44	
	1895-96	6·44	0 44	0·09	6·79	
Hoshiárpur	1893-94	4·73	...	...	4·73	
	1894-95	4·73	...	...	4 73	
	1895-96	4·73	1·25	...	5·98	
Simla	1893-94	6·02	3·00	1·00	8·02	
	1894-95	8·02	1·00	1·02	8·00	
	1895-96	8·00	...	...	8·00	
Hazára	1893-94	15·07	0·13	0·06	15·14	
	1894-95	15·14	0·62	0·62	15·14	
	1895-96	15·14	0·31	0·06	15·39	
Kángra	1893-94	5·13	1·89	2·55	4·47	
	1894-95	4·47	3·43	3·94	3·96	
	1895 96	3·96	0·70	1·14	3·52	
Do. Municipality ...	1893-94 1894-95 1895-96	5·67	...	...	5·67	
Total ...	1893-94	589·80	181·32	48·14	722·98	
	1894-95	722·98	19·57	211·20	531·35	
	1895-96	531·35	101·33	11·79	620·89	

STATEMENT No. II—*continued.*

Progress Statement of Nurseries in the Canal Divisions for the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7
Division.	Year.	Area under nurseries at beginning of the year.	Area added during the year.	Area given up or transferred to groves during the year.	Area remaining at end of the year.	Remarks.
		Acres.	*Acres.*	*Acres.*	*Acres.*	
Bári Doáb Canal, 1st Division ...	1893-94					
	1894-95					
	1895-96					
Ditto, 2nd Division ...	1893-94					
	1894-95					
	1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Ditto, 3rd Division ...	1893-94					
	1894-95					
	1895-96					
Upper Sutlej Division, Inundation Canals	1893-94					
	1894-95					
	1895-96					
Multan Canals Division	1893-94	13·62	3·65	0·50	16·77	
	1894-95	16·77	3·00	2·50	17·27	
	1895-96	17·27	4·56	5·10	16·73	
Dera Gházi Khan Division, Indus Canals.	1893-94	0·44	...	0·44	...	
	1894-95	...	0·05	...	0·05	
	1895-96	0·05	...	0·05	...	
Muzaffargarh Canals Division ...	1893-94	1·15	...	1·15	...	
	1894-95	...	0·18	...	0·18	
	1895-96	0·18	...	0·07	0·11	
Western Jumna Canal, Karnál Division	1893-94	3·26	0·78	1·67	2·37	1·67 acres in column 5 include 0·75 of an acre transferred to Delhi Division, Western Jumna Canal.
	1894-95	2·37	2·35	1·98	2·74	
	1895-96	2·74	2·49	1·14	4·09	
Ditto, Delhi Division	1893-94	1·81	*2·37	2·36	1·82	Column 5 includes 1·61 acres transferred to plantations and 0·75 of an acre due to adjustment of previous errors during 1893-94.
	1894-95	1·82	4·80	1·59	5·03	
	1895-96	5·03	...	2·21	2·82	2·21 acres shown in column 5 include 1·40 acres destroyed by fire.
Ditto, Hissár Division	1893-94	1·00	0·91	0·50	1·41	* 2·37 acres shown in column 4 includes 0·75 of an acre received by transfer from Karnál Division, 0·12 of an acre due to correction of previous returns and 1·50 acres newly planted during 1893-94.
	1894-95	1·41	9·59	0·85	10·15	
	1895-96	10·15	3·00	4·00	9·15	
Sirhind Canal, Ferozepore Division ...	1893-94	1·86	1·70	1·86	1·70	
	1894-95	1·70	1·73	1·70	1·73	
	1895-96	1·73	1·50	0·80	2·43	
Ditto, Ludhiána Division ...	1893-94	17·51	1·05	4·85	13·71	
	1894-95	13·71	2·07	1·85	13·93	
	1895-96	13·93	1·11	1·66	13·38	
Ditto, Patiála Division ...	1893-94	7·79	0·04	...	7·83	Column 5 includes 1·27 acres transferred to plantations.
	1894-95	7·83	...	1·27	6·56	
	1895-96	6·56	0·22	...	6·78	
Chenáb Canal, 1st Division	1893-94	3·13	...	...	3·13	
	1894-95	3·13	0·75	..	3·88	
	1895-96	3·88	1·48	0·42	4·94	
Ditto, 2nd Division	1893 94	14·53	0·15	6·01	8·67	
	1894-95	8·67	1·24	8·67	1·24	
	1895-96	1·24	2·90	2 29	1·85	
Ditto, 3rd Division	1893-94					
	1894-95	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1895-96					
Ditto, 4th Division	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95	..	2·38	...	2 38	
	1895-96	2·38	0·30	...	2·68	
Swát River Canals Division	1893-94	0·48	...	...	0·48	
	1894-95	0·48	0·01	...	0·49	
	1895-96	0·49	...	...	0·49	
Shahpur Canals Division	1893-94					
	1894-95					
	1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Rohtak Independent Sub-Division ...	1893-94					
	1894-95					
	1895-96					
Total ...	1893-94	66·58	10·65	19·34	57·89	
	1894-95	57·89	28·15	20·41	65·63	
	1895-96	65·63	17·56	17·74	65·45	

STATEMENT No. II—*concluded.*

Progress Statement of Nurseries in the Provincial Divisions for the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7
Division.	Year.	Area under nurseries at beginning of the year.	Area added during the year.	Area given up or transferred to groves during the year.	Area remaining at end of the year.	Remarks.
		Acres.	*Acres.*	*Acres.*	*Acres.*	
Peshâwar Division	1893-94	2·32	0·46	..	2·78	
	1894-95	2·78	0·70	1·46	2·02	
	1895-96	2 02	1·41	1·44	1·99	
Râwalpindi Division	1893-94	1·49	0·07	0·02	1·54	Column 5 includes 0·02 of an acre washed away by the river.
	1894-95	1·54	0·17	0·06	1·65	
	1895-96	1·65	0·20	0·10	1·75	
Kohât North-West Frontier Road Division.	1893-94	...	0·20	...	0·20	
	1894-95	0·20	0·26	0·03	0·43	
	1895-96	0·43	0·14	0·11	0·46	
Gujrânwâla Independent Sub-Division	1893-94	6 63	...	0·10	6·53	
	1894-95	6·53	0·29	3·81	3 01	
	1895-96	3 01	0·16	2·25	0·92	
Jalandhar Division	1893-94	2·69	0·08	0·47	2·30	The areas of the Ludhiâna and Ferozepore Districts have been separately shown in Ferozepore Independent Executive charge.
	1894-95	2·30	0·01	0·54	1·77	
	1895-96	1·77	0·23	0·12	1·88	
Ferozepore Independent Executive charge.	1893-94	4·36	1·78	4·02	2·12	
	1894-95	2·12	0·75	1·00	1·87	
	1895-96	1·87	...	0·30	1·57	
Simla Division	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95					
	1895-96					
Ambala Division	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95					
	1895-96	...	1·33	0·37	0·96	
Delhi Division	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95					
	1895-96					
Dera Ismail Khan Division	1893-94	1·70	0·37	1·58	0·49	
	1894-95	0·49	0·33	0·27	0·55	
	1895-96	0·55	0·08	0·22	0·41	0·22 acre shown in column 5 includes 0·12 of an acre transferred to avennes.
Dera Ghâzi Khan Division	1893-94	0·04	0·05	0·04	0·05	
	1894-95	0·05	..	...	0·05	
	1895-96	0·05	...	...	0·05	
Lahore Division	1893-94	3·06	1·69	0·40	4·35	Column 4 includes 0·59 of an acre received by transfer from Amritsar Provincial Division.
	1894-95	4·35	5·29	*2·55	7·09	* Column 5 includes 1·46 acres transferred to groves, 0·93 of an acre transferred to roadside, 0·14 of an acre washed away by floods, and 0·02 of an acre given up.
	1895-96	7·09	0·43	†2·76	4·76	† The entry (2·76 acres) includes 1·96 acres transferred to groves.
Amritsar Division	1893-94	0 59	...	0·59	...	Column 5 includes 0·59 of an acre transferred to Lahore Provincial Division.
	1894-95	...	...	...	...	
	1895-96					
Multan Division	1893-94	1·03	0·24	...	1·27	The entry in column 4 includes 0·04 of an acre due to the correction of previous returns.
	1894-95	1·27	...	...	1·27	
	1895-96					
Total	1893-94	23·91	4 94	7·22	21·63	
	1894-95	21·63	7·80	9·72	19·71	
	1895-96	19·71	3·08	7·67	16·02	

STATEMENT No. III.

Progress Statement of Plantations in the Districts for the years 1893 94 *to* 1895-96.

1	2	3	4	5	6	7	8
District.	Year.	Area taken up for plantation at the beginning of the year.	Area successfully stocked at beginning of year.	Area sown or planted during the year.	Area of failures during the year.	Area stocked at end of the year.	Remarks.
		Acres.	*Acres.*	*Acres.*	*Acres.*	*Acres.*	
Muzaffargarh ..	1893 94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Multan	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Dera Gházi Khan	1893-94 1894-95 1895 96	1,677·00	60·00	...	...	60·00	
Dera Ismail Khan	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Montgomery ...	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Jhang	1893-94 1894 95 1895-96	244·29	244·29	...	..	244·29	
Bannu	1893-94 1894-95 1895-96	1,200·00	1,200·00 1,193·54 1,192·54	11·00 3·00 0·12	17·46 4·00 ..	1,193·54 1,192·54 1,192·66	
Shahpur ...	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Hissár	1893-94 1894-95 1895-96	117·66 139·66 139·66	73·66 104·91 118·23	31·25 41 26 ...	. 27·94 ..	104·91 118·23 118·23	27·94 acres include 22·04 acres transferred to groves.
Ferozepore ...	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Peshawar ...	1893-94 1894 95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Kohát ...	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Rohtak	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Lahore	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Karnál ...	1893-94 1894-95 1895-96	*Nil.*	*Nil*	*Nil.*	*Nil.*	*Nil.*	
Jhelum	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Gujránwála ...	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil*	*Nil.*	
Gurgáon	1893-94 1894-95 1895-96	2,156·34	114·81	... 13·47 13·47	.. 13·47 13·47	114·81	

STATEMENT No. III—*continued.*

1	2	3	4	5	6	7	8
District.	Year.	Area taken up for plantation at the beginning of the year.	Area successfully stocked at beginning of year.	Area sown or planted during the year.	Area of failures during the year.	Area stocked at end of the year.	Remarks.
		Acres.	*Acres.*	*Acres.*	*Acres.*	*Acres.*	
Amritsar ...	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Do. Municipality.	1893-94 1894-95 1895-96	7·00	7·00	...	...	7·00	
Delhi	1893-94 1894-95 1895-96	1,028·15 917 65 917·65	611·77 654·32 574·47	103·10 40·30 4·09	60·55 120·15 2·17	654·32 574·47 576·39	
Do. Municipality	1893-94 1894-95 1895-96	938·73	938·73	...	...	938·73	
Jalandhar ...	1893-94 1894-95 1895-96	164·00 160·00 103·34	164·00 160·00 103·34	... 0·01 ...	4·00 * 56·67 21·91	160·00 103·34 81·43	Column 6 includes 4 acres washed away by the river. * Column 6 includes 11·66 acres washed away by the river and 45·01 acres leased for cultivation. The trees over an area of 21·91 acres were cut down and sold during 1895-96.
Ludhiána ...	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Ráwalpindi ...	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Gujrát	1893-94 1894-95 1895-96	0·10 0·56	0·10 0·56	... 0·56 0·03	... 0·10 0·01	0·10 0·56 0·58	
Gurdáspur ...	1893-94 1894-95 1895-96	26·74	25·55 25 65 25·65	0·15	0·05	25·65	
Ambála	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Siálkot	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Do. Municipality.	1895-96	...	...	2·00	...	2·00	
Hoshiárpur ...	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Simla	1893-94 1894-95 1895-96	52·50 56·50 57·50	52·50 56 50 57·50	6·00 1·00 ...	2·00	56·50 57·50 57·50	
Hazára	1893-94 1894-95 1895-96	41 63	29·50 29·75 29·25	0·37 0·12 0·62	0·12 0 62 0·25	29·75 29·25 29·62	
Kángra Municipality.	1893-94 1894-95 1895-96	59·23	59·23	... ... 18·01	... ... 13·51	59·23 63·73	
Total ...	1893-94 1894-95 1895-96	7,708·37 7,624·97 7,569·67	3,581·14 3,648·83 3,525·60	151·87 99·72 38·34	84·18 222·95 51·32	3,648·83 3,525·60 3,512·62	

STATEMENT No. III—*continued.*

Progress Statement of Plantations in the Canal Divisions for the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7	8
Division.	Year.	Area taken up for plantation at the beginning of the year.	Area successfully stocked at beginning of year.	Area sown or planted during the year.	Area of failures during the year.	Area stocked at end of the year.	Remarks.
		Acres.	*Acres.*	*Acres.*	*Acres.*	*Acres.*	
Bári Doáb Canal, 1st Division.	1893-94	3,564·00	1,903·49	16·00	...	1,919·49	
	1894-95		1,919·49	16·60	...	1,936·09	
	1895-96		1,936·09	32·65	44·00	1,924·74	
Bári Doáb Canal, 2nd Division.	1893-94	1,428·31	1,428·31	28·97	25·48	1,431·80	3·49 acres were sown with *kikar* and 25·48 acres were felled and re-sown.
	1894-95	1,431·80	1,431·80	...	...	1,431·80	
	1895-96				*a* 3·49	1,428 31	
Bári Doáb Canal, 3rd Division.	1893-94	968·35	968·35	...	*b* 3·00	965·35	*a* 3·49 acres due to correction of previous errors.
	1894-95	965·35	965·85	...	...	965·35	*b* Trees were cut down over 3 acres.
	1895-96	988·35					
Upper Sutlej Division, Inundation Canals.	1893-94	45·01	45·01	..	...	45·01	
	1894-95						
	1895-96	45·59	45·01	0·58	...	45 59	
Multan Canals Division.	1893-94	189·86	174·77	0·20	1·00	173 97	
	1894-95		173·97	...	...		
	1895-96		173·97	...	...		
Dera Gházi Khan Division, Indus Canals.	1893-94	20·68	20·68	...	...	20·68	
	1894-95						
	1895-96						
Muzaffargarh Canals Division.	1893-94	...	...	1·15	...	1·15	
	1894-95	1·15	1·15	...	0·30	0·85	
	1895-96	0·85	0·85	...	...	0 85	
Western Jumna Canal, Karnál Division.	1893-94	1,104·32	1,119·21	4·09	21·33	1,101·97	21·33 acres in column 6 include 9·40 acres transferred to Delhi Division and 9·05 acres to Hissár Division.
	1894-95	1,103·72	1,101·97	0·34	...	1,102·31	
	1895-96		1,102 31	33·18	143 76	991·73	
Western Jumna Canal, Delhi Division.	1893-94	1,861·26	1,352 79	*c* 17·62	4·80	1,365 61	*c* 17·62 acres in column 5 include 1·61 acres transferred from nurseries, 9·40 acres transferred from Karnál Division, 2·41 acres due to adjustment of previous errors and 4·20 acres newly planted during 1893-94.
	1894-95	1,860·26	1,365·61	18 73	19·86	1,364·48	
	1895-96	1,601·01	1,364·48	...	0·03	1,364·45	
Western Jumna Canal, Hissár Division.	1893-94	110·25	35·00	*d* 59·05	15·00	79·05	*d* 59·05 acres in column 5 include 9·05 acres transferred from Karnál Division.
	1894-95	104·05	79·05	50·20	10·00	119·25	
	1895-96	131·75	119 25	25·55	19·00	125·80	
Sirhind Canal, Ferozepore Division.	1893-94	4,117·68	1,984·59	242 35	...	2,226·94	*e* 27·20 acres transferred from one Sub-Division to another and column 6 includes 20 acres due to correction of previous return.
	1894-95		2,226 94	24·62	14·50	2,237 06	
	1895-96		2,237·06	86·11	*e* 47·20	2,275·97	
Sirhind Canal, Ludhiána Division.	1893-94	6,608·00	4,438·52	79·96	14·77	4,503 71	4·80 acres in column 6 include 0·80 of an acre transferred to advances to stock up 0·80 of a mile.
	1894-95		4,503·71	21·40	1·41	4,523·70	
	1895-96		4,523·70	28·95	12·60	4,540·05	
Sirhind Canal, Patiála Division	1893-94	3,881·88	2,485·12	...	...	2,485·12	*f* Column 5 includes 1·27 acres received by transfer from nurseries.
	1894-95			*f* 8 07	...	2,493·19	
	1895-46	3,018·48	2,493·19	45·00	...	2,538·19	
Chenáb Canal, 1st Division.	1893-94	432·28	402·39	56·55	...	458·94	*g* 167·89 acres in column 5 include 141·07 acres due to correction of previous errors and 60 acres in column 6 failed on account of want of rain.
	1894-95	635 19	458·94	147·66	79·29	527·31	
	1895-96	806·25	527·31	*g* 167·89	*g* 60·00	635·20	
Chenáb Canal, 2nd Division.	1893-94	18·36	18·36	66·25	20·34	64·27	
	1894-95	64·27	64·27	67·00	5·00	126·27	
	1895-96	126·27	126·27	101 76	8·90	219 13	
Chenáb Canal, 3rd Division.	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95						
	1895 96						
Chenáb Canal, 4th Division.	1893-94	...	...	5·52	...	5·52	
	1894-95	5·52	5 52	10·00	...	15·52	
	1895-96	15·52	15·52	9·00	...	24·52	
Swát River Canals Division.	1893-94	107 80	107·80	...	...	107 80	
	1894-95			6·50	...	114·30	
	1895-96	114·30	114 30	5·48	0·35	119·43	
Shahpur Canals Division.	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95						
	1895-96						
Rohtak Independent Sub-Division.	1893-94						
	1894-95						
	1895-96						
Total ...	1893-94	*24,458·04	16,484·39	577·71	105·72	16,956·38	
	1894-95	*24,706·22	16,956·38	371·12	130·36	17,197·14	
	1895-96	24,784·11	17,197·14	536·15	339·33	17,393·96	

* Difference due to correction of figures in the annual statements.

STATEMENT No. III—*concluded.*

Progress Statement of Plantations in the Provincial Divisions for the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7	8
Division.	Year.	Area taken up for plantation at the beginning of the year.	Area successfully stocked at beginning of year.	Area sown or planted during the year.	Area of failures during the year.	Area stocked at end of the year.	Remarks.
		Acres.	*Acres.*	*Acres.*	*Acres.*	*Acres.*	
Peshâwar Division	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Râwalpindi Division ...	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Kohât North-West Frontier Road Division.	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Gujrânwâla Independent Sub-Division.	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Jalandhar Division	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Ferozepore Independent Executive charge.	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Simla Division	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Ambâla Division	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Delhi Division	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Dera Ismail Khan Division	1893-94 1894-95 1895-96	207·96	157·42 157·42 156·00	... ... 0·21	... 1·42 0·03	157·42 156·00 156·18	
Dera Ghâzi Khan Division ...	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Lahore Division	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Amritsar Division	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Multan Division	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Total ...	1893-94 1894-95 1895-96	207·96	157·42 157·42 156·00	... ... 0·21	... 1·42 0·03	157·42 156·00 156·18	

STATEMENT No. IV.

Progress Statement of Groves in the Districts for the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7
District.	Year.	Area of groves at the beginning of the year.	Area planted or transferred from nurseries during the year.	Area of failures during the year.	Area stocked with trees or plants alive at end of the year.	Remarks.
		Acres.	*Acres.*	*Acres.*	*Acres.*	
Muzaffargarh ...	1893-94	231·98	1·80	...	233·78	
	1894-95	233·78	...	1·23	232·55	
	1895-96	232·55	2·72	...	235·27	
Multan ...	1893-94	21·38	...	...	21·38	
	1894-95					
	1895-96					
Dera Gházi Khan ...	1893-94	10·00	...	...	10·00	
	1894-95					
	1895-96					
Dera Ismail Khan ...	1893-94	17·50	...	4·90	12·60	4·90 acres transferred to the Dera Ismail Khan Provincial Division.
	1894-95	12·60	..	...	12·60	
	1895-96					
Montgomery ...	1893-94	746·00	...	...	746·00	
	1894-95					
	1895-96					
Jhang ...	1893-94	25·83	...	...	25·83	
	1894-95					
	1895-96					
,, Municipality	1893-94	4·09	...	...	4·09	
	1894-95					
	1895-96					
Bannu ...	1893-94	1·93	10·40	*a* 0·40	11·93	*a* 0·40 of an acre transferred to Dera Ismail Khan Provincial Division.
	1894-95	11·93	*b* 0·91	3·00	9·84	*b* 0·91 of an acre includes 0·40 due to correction of previous returns.
	1895-96	9·84	...	0·68	9·16	
hahpur ...	1893-94	984·10	*c* 107·00	11·81	1,079·79	*c* 107 acres include 30·41 acres received by transfer from nurseries.
	1894-95	1,079·79	42·13	6·23	1,115·69	
	1895-96	1,115·69	56·86	7·61	1,164·94	
Hissár ...	1893-94	161·63	...	...	161·63	*d* 192·70 acres include 163·24 acres received by transfer from nurseries, 7·42 acres transferred from Municipality, and 22·04 acres received by transfer from plantations. 5·56 acres received by transfer from Municipality.
	1894-95	161·63	*d* 192·70	21·44	332·89	
	1895-96	332·89	5·56	...	338·45	
,, Municipality	1893-94	27·79	...	...	27·79	*e* 12·26 acres include 7·42 acres transferred to Hissár District and 4·84 transferred to Delhi Provincial Division.
	1894-95	27·79	...	*e* 12·26	15·53	
	1895-96	15·53	...	*f* 7·16	8·37	*f* 7·16 acres include 5·56 acres transferred to Hissár District
Ferozepore ...	1893-94	465·54	3·00	7·00	461·54	
	1894-95	461·54	5·00	...	466·54	
	1895-96	466·54	2·00	...	468·54	
Peshawar ...	1893-94	20·65	...	...	20·65	
	1894-95					
	1895-96					
,, Municipality	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95					
	1895-96					

STATEMENT No. IV—*continued.*

1	2	3	4	5	6	7
District.	Year.	Area of groves at the beginning of the year.	Area planted or transferred from nurseries during the year.	Area of failures during the year.	Area stocked with trees or plants alive at end of the year.	Remarks.
		Acres.	*Acres.*	*Acres.*	*Acres.*	
Kohát ...	1893-94	13·78	1·62	0·22	15·18	
	1894-95	15·18	5·82	1·12	19·68	
	1895-96	19·68	4·04	0·01	23·71	
Rohtak ...	1893-94	543 94	...	..	543·94	
	1894-95					
	1895-96					
Lahore ...	1893-94	15·92	...	...	15·92	
	1894-95	15·92	1·02	0·21	16 73	
	1895-96	16·73	...	...	16·73	
Karnál ...	1893-94	317·37	...	...	317·37	
	1894-95					
	1895-96					
Jhelum ...	1893-94	5·62	...	...	5·62	
	1894-95					
	1895-96					
Gujránwála ...	1893-94	...	...	...	...	
	1894-95	...	1·51	...	1·51	
	1895-96	1·51	...	...	1·51	
Gurgáon ...	1893-94	285·39	...	..	285·39	
	1894-95					
	1895-96					
Amritsar ...	1893-94	3·37	...	...	3·37	
	1894-95					
	1895-96					
Delhi ...	1893-94	14·61	0·87	0·11	15·37	
	1894-95	15·37	0·63	0·20	15·80	
	1895-96	15·80	6·20	5·58	16·51	
Municipality	1893-94	...	1·50	...	1·50	1·50 acres omitted in previous returns.
	1894-95	1·50			1·50	
	1895-96		...	...		
Jalandhar ...	1893-94	5·31	*g* 1·25	...	6·56	*g* 1·25 acres received by transfer from nurseries.
	1894-95	6·56	*h* 5·45	...	12·01	*h* 5·45 acres received by transfer from nurseries.
	1895-96	12·01	...	1·25	10·76	
Ludhiána ...	1893 94	352·59	...	...	352·59	The trees over an area of 1·25 acres were cut down and sold during 1895-96.
	1894-95	352·59	1·00	...	353·59	
	1895-96	353·59	*i* 108·06	...	461·65	*i* The entry in column 4 is due to correction of previous returns.
Ráwalpindi ...	1893-94	359·95	...	...	359·95	
	1894-95					
	1895-96					
Municipality	1893-94	20·29	...	...	20·29	
	1894-95	20·29	...	0·04	20 25	
	1895-96	20·25	...	0·04	20·21	
Gujrát ...	1893-94	...	185·21	7·68	177·53	185·21 acres include 185·00 acres due to correction of previous returns.
	1894-95	177·53	...	0·44	177·09	
	1895-96	177·09	3·15	3·42	176·82	

STATEMENT No. IV—*continued.*

1	2	3	4	5	6	7
District.	Year.	Area of groves at the beginning of the year.	Area planted or transferred from nurseries during the year.	Area of failures during the year.	Area stocked with trees or plants alive at end of the year.	Remarks.
		Acres.	*Acres*	*Acres.*	*Acres.*	
Gujrat Municipality	1895-96	..	4·53	1·00	3·53	
Gurdáspur ...	1893-94	4·88	...	...	4·88	
	1894-95	4·88	3·47	0·20	8·15	
	1895-96	8·15	...	..	8·15	
Ambála ...	1893-94	112·90	...	...	112·90	
	1894-95	112·90	...	69·03	43·87	
	1895-96	43·87	...	24·03	18·04	
Siálkot ...	1893-94	13·15	0·02	...	13·17	
	1894-95	13·17	1·50	...	14·67	
	1895-96	14·67	...	...	14·67	
Hoshiárpur ...	1893-94	15·23	...	...	15·23	
	1894-95					
	1895-96					
Simla ...	1893-94	13·62	.	...	13·62	
	1894-95					
	1895-96					
Hazára ...	1893-94	34·65	..	...	34·65	
	1894-95					
	1895-96					
Kángra ...	1893-94	19·05	58·63	...	77·68	
	1894-95	77·68	...	...	77·68	
	1895-96	77·68	0·60	...	78·28	
Municipality...	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95					
	1895-96					
Total ...	1893-94	4,870·04	371 30	31·62	5,209·72	
	1894-95	5,209·72	260·94	115·40	5,355·26	
	1895-96	5,355·26	153 81	51·68	5,497·39	

STATEMENT No. IV—*concluded.*

Progress Statement of Groves in the Provincial Divisions for the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7
Division.	Year.	Area of groves at the beginning of the year.	Area planted or transferred from nurseries during the year.	Area of failures during the year.	Area stocked with trees or plants alive at end of the year.	Remarks.
		Acres.	*Acres.*	*Acres.*	*Acres.*	
Peshâwar Division	1893-94	127·42	...	0·04	127·38	The entry in column 5 is due to correction of previous returns.
	1894-95	127·38	...	...	127 38	
	1895-96					
Râwalpindi Division	1893-94	228·83	...	19·28	209·55	19·28 acres include 10·50 acres washed away by the river and 8·78 acres transferred to the Military Department.
	1894-95	209·55	...	...	209·55	
	1895-96	209·55	9·02	1·30	217·27	
Kohât North-West Frontier Road Division.	1893-94	1·18	0·88	0·35	1 71	
	1894-95	1·71	0·12	...	1·83	
	1895-96	1·83	...	...	1·83	
Gujrânwâla Independent Sub-Division.	1893-94	262 41	0·34	2·00	260·75	
	1894-95	260·75	0·38	1·00	260·13	
	1895-96	260·13	...	...	260·13	
Jalandhar Division	1893-94	...	5·25	...	5·25	The areas of the Ferozepore and Ludhiâna Districts have been separately shown in Ferozepore Independent Executive charge.
	1894-95	5·25	...	...	5·25	
	1895-96					
Ferozepore Independent Executive charge.	1893-94	496·41	...	..	496.41	
	1894-95	496·41	...	...	496.41	
	1895-96					
Simla Division ...	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95					
	1895-96					
Ambâla Division ...	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95					
	1895-96					
Delhi Division ...	1893-94	...	...	...	...	1·84 acres received by transfer from Sirsa Municipal Committee in the Hissâr District.
	1894-95	...	4·84	...	4·84	
	1895-96	4·84	...	...	4·84	
Dera Ismail Khan Division.	1893-94	10·36	0·88	...	17·24	Column 4 includes 4·90 acres transferred from Dera Ismail Khan District and 0·40 of an acre from Bannu District.
	1894-95	17·24	...	...	17·24	
	1895-96	17·24	0·08	0·86	16·46	
Dera Ghâzi Khan Division.	1893-94	2·91	0·08	...	2·99	
	1894-95	2·99	...	...	2·99	
	1895-96					
Lahore Division ...	1893-94	22·50	...	....	22·50	1·46 acres received by transfer from nurseries. 1·96 acres received by transfer from nurseries.
	1894-95	22·50	1·46	...	23·96	
	1895-96	23·96	1·96	4·00	21·92	
Amritsar Division ...	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95					
	1895-96					
Multan Division ...	1893-94	1·70	...	...	1·70	
	1894-96					
	1895-96					
Total ...	1893-94	1,153·72	13·43	21·67	1,145·48	
	1894-95	1,145·48	6·80	1·00	1,151·28	
	1895-96	1,151·28	11·06	6·16	1,156·18	

STATEMENT No. V

Progress Statement of Avenues in the Districts for the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7	8
District.	Year.	Length of roads and canals suitable for avenues.	Length of roads and canals fully stocked with trees at beginning of year.	Length of roads and canals planted during the year.	Length of roads and canals which have failed during the year	Length of roads and canals fully stocked with trees or plants alive at end of the year.	Remarks.
		Miles.	*Miles.*	*Miles.*	*Miles*	*Miles.*	
Muzaffargarh ...	1893-94	295·85	107·27	4·10	0·27	111·10	
	1894-95		111·10	7·25	..	118·35	
	1895-96		118·35	1·83	0·18	120·00	
Multan ...	1893-94	1,231·24	213·44	24·27	35·35	202·36	35·35 miles in column 6 include 10·50 miles due to correction of previous returns and 24·85 miles as actual failures.
	1894-95	1,227·00	202·36	23·24	7·27	218·33	
	1895-96	1,229 00	218·33	10·34	5·92	222·75	
Dera Gházi Khan	1893-94	114·00	26·75	1·75	...	28·50	
	1894 95		28·50	...	...	28·50	
	1895-96		28·50	6·50	...	35·00	
Dera Ismail Khan	1893-94	234·00	44·00	4·00	1·00	47·00	
	1894-95	190·00	47·00	3·00	0·50	49·50	
	1895-96	190·00	49·50	0·50	0·25	49·75	
Montgomery ...	1893-94	250·00	133·00	...	2 00	13 ·00	2 miles in columns 6 due to correction of previous returns.
	1894-95		131·00	..	...	131·00	
	1895-96		131·00	1·00	...	132·00	
Jhang ..	1893-94	223·49	34·35	...	...	34·35	2 miles transferred to Multan Provincial Sub-Division during 1894-95.
	1894-95		34·35	...	2 00	32·35	
	1895-96		32 35	1·65	0·65	33·35	
„ Municipality	1893-94	48·09	21·82	...	..	21·82	
	1894-95						
	1895-96						
Bannu ...	1893-94	131·29	69·23	6·09	27·52	47·80	27·52 miles include 20·25 miles transferred to the Dera Ismail Khan Provincial Division and 6·75 miles due to correction of previous returns.
	1894-95	147 29	47·80	a 12·65	2·35	58·10	
	1895-96	147·29	58 10	11·68	1·00	68·78	
Shahpur ...	1893-94	541·12	472·37	10 05	0·24	482 18	a 12·65 miles include 5 miles due to adjustment of previous errors.
	1894-95		482·18	4·72	0·07	486·83	
	1895-96		486·83	28·54	3·77	511·60	
„ Municipality	1893-94	11·22	14·08	0·27	...	14·35	
	1894-95		14·35	0·79	...	15·14	
	1895-96		15·14	0·24	0 01	15 37	
Hissár ...	1893-94	393·81	103·05	...	...	103·05	
	1894-95						
	1895-96						
Municipality	1893-94	5·59	5·21	...	...	5·21	
	1894-95						
	1895-96						
Ferozepore ...	1893-94	731·75	508 90	6·00	0·90	514 00	0·90 mile due to erosion by River Sutlej during 1893-94.
	1894 95		514·00	6·00	...	520·00	
	1895-96		520 00	7 00	6·00	521·00	
Peshawar ...	1 893-94	511·00	367·90	84·25	41·25	410·90	
	1 894 95	500·94	410·90	47·80	23·90	434·80	
	1 895-96	570·94	434·80	38·00	17·00	455·80	
„ Municipality	1893-94	5·50	5·30	...	...	5·50	
	1894-95						
	1895-96						
Kohát ...	1893-94	14·32	5·21	1·98	0·15	7·04	
	1894-95		7 04	4·75	2·50	9·29	
	1895-96		9·29	3·15	2·15	10·29	

STATEMENT No. V—*continued*.

1	2	3	4	5	6	7	8
District.	Year.	Length of roads and canals suitable for avenues.	Length of roads and canals fully stocked with trees at beginning of year.	Length of roads and canals planted during the year.	Length of roads and canals which have failed during the year.	Length of roads and canals fully stocked with trees or plants alive at end of the year.	Remarks.
		Miles.	*Miles.*	*Miles.*	*Miles.*	*Miles.*	
Rohtak ...	1893-94	461·08	222·43	6·00	1·00	227·43	
	1894-95	461·08	227·43	3·00	1·50	228·93	
	1895-96	415·08	228·93	5·00	37·00	196·93	37·00 miles include 36 miles transferred to the Delhi Provincial Division.
Lahore ...	1893-94	412·16	192·96	33·96	1·25	225·67	
	1894-95	413·41	225 67	3·27	0·50	228·44	
	1895-96	413·41	228·44	2·83	1·58	229·69	33·96 miles include 10·46 miles received by transfer from Lahore Provincial Division.
Municipality	1893-94	56·14	53·43		...	53·43	
	1894-95						
	1895-96						
Karnál ...	1893-94	241·70	77·70	...	...	77·70	
	1894-95		77 70	0·37	...	78·07	
	1895-96		78 07	4 35	1·12	81·30	
Municipality	1893-94	8·23	8·23	...	...	8·23	
	1894-95						
	1895-96						
Jhelum ...	1893-94	395·01	274·25	10·19	0·61	283·83	
	1894-95	406·01	283 83	19·21	1 30	301·74	
	1895-96	406 01	301·74	11·02	0·34	312·42	
Municipality	1893-94	16·52	15·95	0·46	0·05	16·36	
	1894-95		16·36	0·42	0·19	16·59	
	1895-96		16·59	2·40	0 51	18·48	
Gujránwála ...	1893-94	457·83	113·03	33·55	4·59	141·99	
	1894-95		141·99	23·00	...	164·99	
	1895-96		164 99	...	...	164·99	
Gurgáon ...	1893-94	396·15	253·80	6·90	3·00	257·70	
	1894-95		257·70	18·14	17·14	258·70	
	1895-96		258·70	1·25	0·50	259·45	
Amritsar ...	1893-94	278·98	167·85	14·55	11·23	171·17	
	1894-95		171·17	14·03	13·43	171·77	
	1895-96		171·77	12·82	12·08	172·51	
„ Municipality	1893-94	66·00	48·27	1·77	...	50·04	
	1894-95		50·04	1·08	...	51·12	
	1895-96		51·12	...	...	51·12	
Delhi ...	1893-94	338·12	151·59	27·35	22·94	156·00	
	1894 95	338·12	156·00	16·32	13·10	159·22	
	1895-96	337·67	159·22	3·27	11·26	151 23	
„ Municipality	1893-94	38·00	25·00	...	...	25·00	
	1894 95						
	1895-96						
Jalandhar ...	1893-94	283·80	230·43	6·25	..	236·68	
	1894-95		236·68	...	...	236·68	
	1895-96		236·68	...	1·75	234·93	1·75 miles due to correction of previous returns.

STATEMENT No. V—*continued.*

1	2	3	4	5	6	7	8
District.	Year.	Length of roads and canals suitable for avenues.	Length of roads and canals fully stocked with trees at beginning of year.	Length of roads and canals planted during the year.	Length of roads and canals which have failed during the year.	Length of roads and canals fully stocked with trees or plants alive at end of the year.	Remarks.
		Miles.	*Miles.*	*Miles.*	*Miles.*	*Miles.*	
Ludhiána ...	1893-94	157·75	138·24	1·12	...	139·36	
	1894-95		139·36	10·25	...	149·61	
	1895-96		149·61	9·75	37·86	121·50	37·86 miles include 28·11 miles due to correction of previous returns.
Ráwalpindi ...	1893-94	987 97	330·82	7·67	4·29	334·20	
	1894-95		334·20	...	0·36	333 84	
	1895-96		333·84	4·20	12·71	325·33	
„ Municipality	1893-94	11·61	10·36	...	...	10·36	
	1894-95		10·36	0·12	0·02	10·46	
	1895-96		10·46	...	...	10·46	
Gujrát ...	1893-94	611·00	418·00	10·60	8 60	420 00	
	1894-95		420 00	13·81	11·47	422·34	
	1895 96		422·34	16·99	12 72	426·61	
„ Municipality	1895-96	10·85	...	9·08	1·44	7·64	9·08 miles include 7·48 miles due to omissions of previous years.
Gurdáspur ...	1893-94	605·39	426·80	35·16	3·46	458·50	
	1894-95		458·50	25·00	26·00	457·50	
	1895 96		457·50	13 00	4·50	466·00	
Ambála ...	1893-94	383·92	323·99	83·27	67·85	289 41	66 23 miles in column 6 include 28·43 miles transferred to Ambála Provincial Division during 1894-95.
	1894 95	344·51	289·41	14 73	66·23	237·91	
	1895-96	367·66	237 91	23·40	65·03	196·28	
Siálkot ...	1893-94	838·50	479·49	29·00	...	508·49	
	1894-95		508·49	9 25	5·00	512·74	
	1895-96		512·74	29·50	0 50	541·74	
Municipality	1893-94	6 50	3·50	...	...	3·50	
	1894 95			...	...	3·50	
	1895-96			1·50	...	5·00	
Hoshiárpur ...	1893-94	440·50	434·16	6·00	...	440·16	
	1894-95		440·16	...	...	440·16	
	1895-96		440 16	0·34	...	440·50	
Simla ...	1893-94	2·66	2·66	...	...	2·66	
	1894-95						
	1895-96						
Hazára ...	1893-94	47·00	15·80	0·50	...	16·30	
	1894 95		16·30	1·00	1·00	16·30	
	1895-96		16·30	3 00	1·00	18·30	
„ Municipality	1893-94	4·50	4·00	0·25	...	4·25	
	1894 95		4 25	...	...	4·25	
	1895-96		4·25	0·50	0·25	4·50	
Kángra ...	1893-94	501·59	367·34	66·69	39 27	394·76	
	1894-95		394·76	27·97	14 89	407·84	
	1895-96		407·84	14·94	5·83	416·95	
Dharmsála Municipality.	1893-94	6·35	6·35	...	...	6·35	
	1894 95						
	1895-96						
Total ...	1893-94	12,790·23	6,928·51	474·00	276·82	7,125·69	
	1894-95	*12,771·77	7,125 69	311·17	210·72	7,226·14	
	1895-96	12,787·32	7,226·14	279·57	244·91	7,260·80	

Difference due to correction of figures in the annual statement.

STATEMENT No. V—*continued.*

Progress Statement of Avenues in the Canal Divisions for the year 1893-94 *to* 1895-96.

1	2	3	4	5	6	7	8
Division.	Year.	Length of roads and canals suitable for avenues.	Length of roads and canals fully stocked with trees at beginning of year.	Length of roads and canals planted during the year.	Length of roads and canals which have failed during the year.	Length of roads and canals, fully stocked with trees or plants alive at end of the year.	Remarks.
		Miles.	*Miles.*	*Miles.*	*Miles.*	*Miles.*	
Bári Doáb Canal, 1st Division.	1893-94	179·70	147·76	...	...	147·76	
	1894-95			...	...	147·76	
	1895-96			6·50	1·40	152·86	
Bári Doáb Canal, 2nd Division.	1893-94	103·53	103·06	...	...	103·06	
	1894-95	103·06	103·06	...	...	103·06	
	1895-96	103·06	103·06	...	...	103·06	
Bári Doáb Canal, 3rd Division.	1893-94	72·80	72·80	...	1·00	71·80	The entries in column 6 are due to trees blown down by storms and to dry trees being cut.
	1894-95		71·80	...	2 00	69·80	
	1895-96		69·80	...	...	69·80	
Upper Sutlej Division, Inundation Canal.	1893-94	478·31	283·18	...	...	283·18	
	1894-95						
	1895-96	491·77	283·18	*a* 33·60	...	316·78	*a* Tamarisk and *kíkar* trees in those lengths grow spontaneously on the canal and rájbaha banks.
Multán Canals Division.	1893-94	703 10	509 60	10·70	*b* 7·50	572·80	
	1894-95	712·60	572·80	28·40	*c* 16·10	585·10	
	1895-96	626·75	585·10	7·60	15·70	577·00	
Dera Gházi Khan Division, Indus Canals.	1893-94	401·53	181·57	1·00	...	182·57	*b* 7·50 miles include 4·75 miles due to river action.
	1894-95	401·53	182·57	...	...	182·57	
	1895-96	399·48	182·57	..	1·86	180·71	
Muzaffargarh Canal Division.	1893-94	90·11	30·68	2·80	9·87	29·61	*c* 16·10 miles include 15·10 miles due to river action
	1894-95	80·38	29·61	0 30	0·80	29·11	
	1895-96	69·15	29·11	0·07	5·20	23·98	
Western Jumna Canal, Karnál Division.	1893-94	437·37	398·89	24·83	*d* 147·24	276·48	*d* 147·24 miles in column 6 include 119·72 miles transferred to Hissár Division and 17·95 miles to Delhi Division.
	1894-95	490·77	276·48	12·22	0·50	288·20	
	1895-96	490·77	288·20	19·44	7·65	299·99	
Western Jumna Canal, Delhi Division.	1893-94	320·08	219·85	*e* 19·75	4·80	234·80	*e* 19·75 miles in column 5 include 17·95 miles transferred from Karnál Division, 0·80 of a mile transferred from plantations, and 1 mile newly planted during 1893-94.
	1894-95	370 19	234·80	..	4·30	230·50	
	1895-96	362·79	230·50	19 87	4·97	245·40	
Western Jumna Canal, Hissár Division.	1893-94	184·79	7·40	*f* 146·86	3·54	150·72	*f* 146·86 miles in column 5 include 119·72 miles transferred from Karnál Division and 27·14 miles planted during 1893-94.
	1894-95	184·79	150·72	25·76	12·09	164·39	
	1895-96	191·22	164·39	16·00	14·00	166·39	
Sirhind Canal, Ferozepore Division.	1893-94	294·20	58·20	1·60	0·60	59 20	*g* Column 5 includes 4·48 miles actually planted during the year and 96·57 miles due to correction of previous returns.
	1894-95		59·20	...	0·82	58·38	
	1895-96		58·38	*g* 101·05	...	159·43	
Sirhind Canal, Ludhiána Division.	1893-94	834·40	191·63	7·40	2·69	196·36	
	1894-95		196 36	13·04	0·25	209·15	
	1895-96		209·15	10·75	1·75	218·15	
Sirhind Canal, Patiála Division.	1893-94	221·34	114·69	3·74	2·10	116·33	
	1894-95		116·33	6·57	2·66	120·24	
	1895-96		120·24	11·10	2·70	128·64	
Chenab Canal, 1st Division.	1893-94	90 50	51·00	8·50	10·00	50·40	
	1894-95	105·30	50·40	15·00	6·00	59·40	
	1895-96	109·79	50·40	19·92	7·18	72·14	7·18 miles include 0·68 miles due to correction of previous returns.
Chenáb Canal, 2nd Division.	1893-94	501·60	18·57	25·10	17·74	25·93	
	1894-95	501·00	25·93	34·07	7·00	53·00	
	1895-96	509·10	53·00	39·08	1·60	90·48	
Chenáb Canal, 3rd Division.	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95						
	1895-96						
Chenáb Canal, 4th Division.	1893-94	*Nil*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95						
	1895-96	61·60	...	0·20	...	0·20	
Swát River Canal Division.	1893-94	176·00	148·45	5·50	..	153·95	
	1894-95	176·00	153·95	0·60	...	154·55	
	1895-96	177·80	154·55	14·84	29·76	139·63	29·76 miles in column 6 include 20·08 due to correction of previous errors.
Shahpur Canals Division.	1893-94	...	...	...	...	...	
	1894-95	251·96	..	51·26	...	51·26	
	1895-96	255·95	51·26	...	...	51·26	
Rohtak Independent Sub-Division.	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95						
	1895-96	95·55	...	...	...	...	
Total ...	1893-94	4,595·36	2,604·25	257·78	207·08	2,654·95	
	1894-95	4,958·33	2,654·95	187·22	52·52	2,789·65	
	1895-96	5,047·22	2,789·65	300·02	93·77	2,995·90	

STATEMENT No. V—*concluded.*

Progress Statement of Avenues in the Provincial Divisions for the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7	8
Division.	Year.	Length of roads and canals suitable for avenues.	Length of roads and canals fully stocked with trees at beginning of year.	Length of roads and canals planted during the year.	Length of roads and canals which have failed during the year.	Length of roads and canals fully stocked with trees or plants alive at end of the year.	Remarks.
		Miles.	*Miles.*	*Miles.*	*Miles.*	*Miles.*	
Peshâwar Division.	1893-94	212·00	153·47	18·37	7·66	164·18	7·66 miles shown in column 6 include 0·01 of a mile due to correction of previous return.
	1894-95		164·48	16 82	* 22·70	158 30	* Column 6 includes 15·41 miles due to adjustment of previous errors and 7 29 miles as failures.
	1895-96		158 30	17·67	9·65	166·32	
Râwalpindi Division.	1893-94	206·64	84·01	2·22	...	86·23	
	1894-95		86·23	3·01	0·72	88·52	
	1895-96		88·52	4·41	2·60	90·33	
Kohât North-West Frontier Road Division.	1893-94	78·51	12·33	3·53	1·04	14·82	
	1894-95		14·82	2·03	0·95	15·90	
	1895-96		15·90	4·86	1·98	18·78	
Gujrânwâla Independent Sub-Division.	1893-94	90·94	90·29	...	...	90·29	
	1894-95	90·29		. .	...	90·29	
	1895-96	90·29		1·75	0·25	91·79	
Jalandhar Division.	1893-94	148·66	86 13	10·57	8·40	88·30	
	1894-95	148 66	88·30	5·13	1·25	92 18	
	1895-96	144·58	92·18	5 66	5·80	92 04	
Independent Executive charge, Ferozepore.	1893-94	97·97	62 26	3·20	0 58	64·88	
	1894-95	97 97	64·88	1·70	0·15	66·43	
	1895-96	100·23	66·43	2·09	...	68·52	
Simla Division ...	1893-94	224·00	..	...	...	...	
	1894-95						
	1895 96						
Ambâla Division	1893-94	153·97	117·84	18·30	17·10	119 04	Column 5 includes 28·43 miles received by transfer from the Ambâla District Local Boards and column 6 includes 4·93 miles due to correction of previous returns during 1894-95.
	1894-95	187·47	119·04	28·43	4·93	142·54	
	1895-96	190·73	142 54	7·12	4·54	145·12	
Delhi Division ...	1893-94	90·00	69 38	0·10	0·03	69·45	*a* 38·55 includes 36 miles received in transfer from Rohtak District.
	1894-95	90·00	69·45	0·50	0·75	69·20	
	1895-96	137·00	69·20	*a* 38·55	10·00	97·75	
Dera Ismail Khan Division.	1893-94	190·95	5·62	*b* 43·70	0·25	49·07	*b* Column 5 includes 20·25 miles transferred from Bannu District during 1893-94.
	1894-95		49·07	0·25	0·61	48·71	
	1895-96		48·71	5·44	1·62	52·53	
Dera Ghâzi Khan Division.	1893-94	197·50	51·75	5·30	3·25	53·80	*c* Column 5 includes 42·63 miles received by transfer from the late Amritsar Division and column 6 includes 10 46 miles transferred to the Lahore District Board during 1893-94.
	1894-95	197·50	53·80	1·75	...	55·55	
	1895-96	111 63	55 55	...	0·87	54·68	
Lahore Division	1893-94	173 00	91·62	*c* 52·38	21·56	122·44	
	1894-95	173·50	122·44	18·61	8·08	132·97	
	1895-96	173·50	132·97	4·00	11·63	125·34	
Amritsar Division	1893-94	...	42·63	...	42·63	...	42·63 miles transferred to Lahore Provincial Division, owing to the abolishment of Amritsar Division.
Multan Division	1893-94	31·30	23·27	0·30	0 80	22 77	*d* Column 5 includes 2 miles transferred from Jhang District during 1894-95.
	1894-95	33·30	22·77	*d* 3·01	...	25·78	
	1895-96	33·30	25·78	0·05	...	25·83	
Total ...	1893 94	1,895·44	890·60	157·97	103·30	945·27	
	1894-95	1,930·79	945·27	81·24	40·14	986·37	
	1895-96	1,893·36	986·37	91·60	48·04	1,029·03	

STATEMENT No. VI.

Income from Arboriculture in the Districts during the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7	8	9
District.	Year.	Ornamental Gardens.	Nurseries.	Plantations.	Groves and Avenues.	Miscellaneous.	Total.	Remarks.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Muzaffargarh ...	1893-94	795	92	...	737	22	1,646	
	1894-95	525	186	...	3,746	48	4,455	
	1895-96	480	...	...	1,300	26	1,806	
Multán	1893-94	2,256	15	...	709	46	3,026	
	1894-95	2,178	3	...	573	35	2,789	
	1895-96	2,873	215	...	700	75	3,863	
Dera Gházi Khan ...	1893-94	454	...	..	134	372	960	
	1894-95	382	...	...	91	312	785	
	1895-96	432	...	...	79	312	823	
Dera Ismail Khan...	1893-94	...	...	...	296	...	296	
	1894-95	..	...	...	459	...	459	
	1895-96	...	...	...	272	...	272	
Montgomery ...	1893-94	450	...	...	332	...	782	
	1894-95	475	...	...	542	...	1,017	
	1895-96	1,275	...	...	330	...	1,605	
Jhang	1893-94	677	...	292	118	...	1,087	
	1894-95	405	15	378	52	104	954	
	1895-96	705	...	1,061	127	...	1,893	
„ Municipality	1893-94	181	...	...	240	24	445	
	1894-95	201	...	...	162	...	363	
	1895-96	203	...	...	291	...	494	
Bannu	1893-94	374	...	1,500	376	5,225	7,475	
	1894-95	552	...	1,115	253	5,493	7,413	
	1895-96	723	...	1,766	294	6,957	9,740	
Shahpur	1893-94	1,442	...	...	9,181	1,781	12,404	
	1894-95	1,181	...	...	7,344	739	9,264	
	1895-96	1,694	...	...	7,304	704	9,702	
Hissár	1893-94	39	174	...	853	...	1,066	
	1894-95	132	1,484	...	552	...	2,168	
	1895-96	199	97	...	606	...	902	
„ Municipality	1893-94	615	...	...	92	20	727	
	1894-95	655	...	...	...	...	655	
	1895-96	451	...	...	85	...	536	
Ferozepore ...	1893-94	...	...	...	4,218	...	4,218	
	1894-95	..	...	...	4,220	...	4,220	
	1895-96	...	17	...	11,647	...	11,664	
Peshawar	1893-94	198	...	...	2,249	...	2,447	
	1894-95	284	...	...	413	...	697	
	1895-96	230	...	...	559	...	789	
„ Municipality	1893-94	1,795	...	...	38	...	1,833	
	1894-95	2,344	...	...	23	...	2,367	
	1895-96	1,988	...	...	300	...	2,288	
Kohát	1893-94	615	...	...	...	...	615	
	1894-95	568	...	...	...	32	600	
	1895-96	875	...	...	5	72	952	
Rohtak	1893-94	...	...	...	1,378	157	1,535	
	1894-95	...	...	...	1,663	43	1,706	
	1895-96	...	...	...	1,139	110	1,249	
Lahore	1893-94	3,520	...	...	1,116	30	4,666	
	1894-95	4,011	...	...	866	149	5,026	
	1895-96	4,480	...	...	2,167	...	6,647	
„ Municipality	1893-94	6,559	...	...	...	1,906	8,465	
	1894-95	3,813	...	...	6	2,091	5,910	
	1895-96	5,241	...	...	...	1,770	7,011	
Karnál	1893-94	...	229	...	433	107	769	
	1894-95	...	149	...	2,619	218	2,986	
	1895-96	...	190	...	1,990	46	2,226	

STATEMENT No. VI—*continued.*

1	2	3	4	5	6	7	8	9
District.	Year.	Ornamental Gardens.	Nurseries.	Plantations.	Groves and Avenues.	Miscellaneous.	Total.	Remarks.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Jhelum	1893-94	686	...	...	2,210	136	3,032	
	1894-95	1,162	...	...	2,736	...	3,898	
	1895-96	893	...	...	1,911	...	2,804	
Gujránwála ...	1893-94	1,237	...	...	631	134	2,002	
	1894-95	1,177	...	...	1,231	72	2,480	
	1895-96	912	15	...	1,142	26	2,095	
Gurgáon	1893-94	192	65	380	4,250	1	4,888	
	1894-95	169	16	323	3,320	...	*3,828	
	1895-96	404	81	370	3,353	50	4,258	
Amritsar	1893-94	206	82	...	2,124	15	2,517	
	1894-95	290	75	...	2,053	20	2,438	
	1895-96	270	60	...	1,935	15	2,280	
„ Municipality	1893-94	3,880	65	...	1,649	922	6,516	
	1894-95	3,658	90	...	2,520	1,542	7,819	
	1895-96	2,494	...	...	3,144	775	6,413	
Delhi	1893-94	...	4	1,097	597	...	1,698	
	1894-95	...	...	1,373	732	...	2,105	
	1895-96	...	...	1,521	707	...	2,228	
„ Municipality	1893-94	3,872	...	2,581	734	...	7,187	
	1894-95	5,242	...	2,965	*271	...	8,478	* Rs. 1,878 transferred to ornamental gardens.
	1895-96	5,451	...	2,892	300	...	8,643	
Jalandhar	1893-94	883	898	135	8,606	163	10,685	
	1894-95	739	334	616	4,522	138	6,349	
	1895-96	702	474	4,218	4,929	72	10,395	
Ludhiána	1893-94	250	2,628	...	8,656	...	11,534	
	1894-95	111	1,913	...	3,165	16	5,205	
	1895-96	1,584	...	...	17,208	...	18,792	
Ráwalpindi ...	1893-94	3,230	...	...	860	...	4,090	
	1894-95	3,569	...	...	928	...	4,497	
	1895-96	3,171	...	...	1,397	...	4,568	
„ Municipality	1893-94	1,153	...	...	1,024	...	2,177	
	1894-95	1,157	...	...	434	...	1,591	
	1895-96	1,964	...	...	301	...	2,265	
Gujrát	1893-94	86	...	4	8,966	285	9,291	
	1894-95	73	...	...	9,589	184	9,846	
	1895-96	117	...	...	12,026	239	12,382	
„ Municipality	1895-96	183	...	...	409	...	592	
Gurdáspur	1893-94	517	19	...	5,420	...	5,956	
	1894-95	4,913	...	...	3,997	...	8,910	
	1895-96	1,203	81	...	5,620	...	6,904	
Ambála	1893-94	454	...	...	6,066	...	6,520	
	1894-95	659	...	...	3,378	...	4,037	
	1895-96	549	...	...	3,521	...	4,070	
Siálkot	1893-94	2,293	8	...	25,663	350	28,314	
	1894-95	2,376	5	...	17,180	431	19,992	
	1895-96	2,355	...	...	23,113	338	25,806	
Hoshiárpur ...	1893-94	871	...	...	4,296	978	6,145	
	1894-95	1,017	...	...	3,166	1,644	5,827	
	1895-96	804	...	...	2,683	2,114	5,601	
Simla	1893-94	10,091	650	3,467	...	2,060	16,268	
	1894-95	11,140	320	2,922	...	963	15,345	
	1895-96	10,835	360	3,801	...	997	15,993	
Hazára	1893-94	...	134	...	12	32	178	
	1894-95	...	92	...	45	57	194	
	1895-96	...	88	...	63	129	280	
„ Municipality	1893-94	1,692	132	...	163	...	1,987	
	1894-95	2,069	137	...	355	...	2,562	
	1895-96	1,732	102	...	86	...	1,020	
Kángra	1893-94	198	...	...	497	...	695	
	1894-95	264	...	...	591	...	855	
	1895-96	178	...	...	423	...	601	
„ Municipality	1893-94	67	...	...	...	...	67	
	1894-95	99	...	...	...	...	99	
	1895-96	115	...	...	...	...	115	
Total ...	1893-94	51,918	5,195	9,456	1,04,924	14,716	1,86,209	
	1894-95	57,590	4,769	9,692	83,807	14,331	1,70,189	
	1895-96	57,765	1,780	15,629	1,03,406	14,827	1,93,467	

STATEMENT No. VI—*continued.*

Income from Arboriculture in the Canal Divisions during the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7	8	9
Division.	Year.	Ornamental Gardens.	Nurseries.	Plantations.	Groves and Avenues.	Miscellaneous.	Total.	Remarks.
		Rs.	Rs	Rs.	Rs.	Rs.	Rs.	
Bári Doáb Canal, 1st Division.	1893-94	...	...	12,581	...	...	12,581	
	1894-95	...	...	6,419	997	...	7,416	
	1895-96	543	...	9,582	535	751	11,411	
Bári Doáb Canal, 2nd Division.	1893-94	30	...	4,490	...	5,213	9,733	
	1894-95	50	...	2,500	...	3,329	5,879	
	1895-96	77	...	3,782	...	756	4,615	
Bári Doáb Canal, 3rd Division.	1893-94	...	...	5,662	...	3,053	8,715	
	1894-95	...	..	6,000	309	2,803	9,112	
	1895-96	...	...	5,000	1,604	3,302	9,906	
Upper Sutlej Division, Inundation Canals.	1893-94	...	...	7,348	...	2,302	9,650	
	1894-95	...	...	4,044	...	2,147	6,191	
	1895-96	...	...	5,051	...	2,361	7,412	
Multan Canals Division.	1893-94	66	...	...	12,577	1,576	14,219	
	1894-95	...	...	...	6,694	750	7,444	
	1895-96	...	...	...	8,111	346	8,457	
Dera Gházi Khan Division, Indus Canals.	1893-94	...	20	...	2,814	59	2,893	
	1894-95	...	...	...	1,514	68	1,582	
	1895 96	...	...	...	2,264	46	2,310	
Muzaffargarh Canals Division.	1893-94	...	...	...	4,558	...	4,558	
	1894-95	...	...	...	3,115	...	3,115	
	1895-96	...	...	...	2,294	...	2,294	
Western Jumna Canal, Karnál Division.	1893-94	516	...	...	3,294	...	3,810	
	1894-95	148	...	...	407	...	555	
	1895-96	131	...	...	2,695	...	2,826	
Western Jumna Canal, Delhi Division.	1893-94	...	...	...	9,069	...	9,069	
	1894-95	...	...	...	10,181	...	10,181	
	1895-96	...	...	...	5,874	...	5,874	
Western Jumna Canal, Hissár Division.	1893-94	...	...	2,745	...	36	2,781	
	1894-95	...	..	7,799	2	121	7,922	
	1895-96	...	...	4,060	16	20	4,096	
Sirhind Canal, Ferozepore Division.	1893-94	...	...	13	...	2,602	2,615	
	1894-95	...	...	113	...	3,151	3,264	
	1895-96	...	...	144	...	3,707	3,851	
Sirhind Canal, Ludhiána Division.	1893-94	...	...	6,954	...	8,373	15,327	
	1894-95	...	...	2,305	...	5,958	8,263	
	1895-96	...	...	4,456	...	8,758	13,214	
Sirhind Canal, Patiála Division.	1893-94	...	...	878	...	2,699	3,577	
	1894-95	...	...	526	2	2,031	2,559	
	1895-96	...	...	390	...	3,165	3,555	
Chenáb Canal, 1st Division.	1893-94	...	...	31	...	290	321	
	1894-95	...	...	10	...	113	123	
	1895-96	...	...	525	...	63	588	
Chenáb Canal, 2nd Division.	1893-94	...	...	...	...	...	...	
	1894-95	...	...	80	...	...	80	
	1895-96	...	...	213	...	...	213	
Chenáb Canal, 3rd Division.	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Chenáb Canal, 4th Division.	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Swát River Canal Division.	1893-94	...	...	92	...	165	257	
	1894-95	...	...	87	...	31	118	
	1895-96	...	...	319	...	21	340	
Shahpur Canals Division.	1893-94	...	...	...	..	...	...	
	1894-95	...	...	..	3,054	92	3,146	
	1895-96	...	...	...	1,209	24	1,233	
Rohtak Independent Sub-Division.	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
Total	1893-94	612	20	40,794	32,312	26,368	1,00,106	
	1894-95	198	...	29,883	26,275	20,594	76,950	
	1895 96	751	..	33,522	24 602	23,320	82,195	

STATEMENT No. VI—*concluded.*

Income from Arboriculture in the Provincial Divisions during the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7	8	9
Division.	Year.	Ornamental Gardens.	Nurseries.	Plantations.	Groves and Avenues.	Miscellaneous.	Total.	Remarks.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Peshâwar Division	1893-94	...	...	...	488	522	1,010	
	1894-95	...	...	...	547	201	748	
	1895-96	...	2	...	661	383	1,046	
Râwalpindi Division	1893-94	...	...	...	826	1,515	2,341	
	1894-95	...	...	...	536	1,899	2,435	
	1895-96	32	...	...	1,425	1,642	3,099	
Kohât North-West Frontier Road Division.	1893-94	...	...	...	...	...	...	
	1894-95	...	...	...	27	...	27	
	1895 96	...	...	...	16	...	16	
Gujrânwâla Independent Sub-Division.	1893-94	150	...	...	3,092	2,958	6,200	
	1894-95	120	...	...	3,673	2,729	6,522	
	1895-96	152	...	...	1,976	1,972	4,100	
Jalandhar Division	1893-94	...	...	...	3,446	3,030	6,476	
	1894-95	...	...	...	581	1,302	1,883	
	1895 96	...	...	...	6,588	1,191	7,779	
Independent Executive charge, Ferozepore.	1893-94	...	...	...	1,579	3,038	4,617	
	1894-95	...	...	...	556	1,066	1,622	
	1895-96	...	...	491	462	1,049	8,002	
Simla Division ...	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95							
	1895-96							
Ambâla Division ...	1893-94	...	...	...	3,902	989	4,891	
	1894-95	...	...	...	3,532	2,300	5,832	
	1895-96	...	...	...	5,739	2,092	7,831	
Delhi Division ...	1893-94	...	...	...	821	675	1,496	
	1894-95	...	...	...	285	797	1,082	
	1895-96	...	...	...	185	666	851	
Dera Ismail Khan Division.	1893-94	...	...	27	40	116	183	
	1894-95	19	...	*135	74	30	258	* Rs. 36 transferred to groves and avenues.
	1895-96	56	...	78	317	23	474	
Dera Ghâzi Khan Division.	1893-94	...	...	...	323	...	323	
	1894-95	...	...	...	276	...	276	
	1895-96	...	...	...	696	...	696	
Lahore Division ...	1893-94	59	...	...	5,027	3,243	8,329	
	1894-95	67	...	...	3,109	3,157	6,333	
	1895-96	98	...	..	3,560	1,323	4,981	
Amritsar Division ..	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	
	1894-95							
	1895-96							
Multan Division ...	1893-94	...	...	...	29	...	20	
	1894-95	...	...	...	4	...	4	
	1895-96	...	..	...	11	...	11	
Total ...	1893-94	209	...	27	19,573	16,086	35,895	
	1894-95	206	...	135	13,200	13,481	27,022	
	1895-96	338	2	569	27,636	10,341	38,896	

STATEMENT No. VII.

Expenditure on Arboriculture in the Districts during the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7	8	9	10	11	12
		Works.								Establishment.	
		Ornamental Gardens.		*Nurseries.*		*Plantations and Afforestation.*		*Groves and Avenues.*			
District.	Year.	Maintenance and repairs of existing Gardens.	Extension of Gardens.	Maintenance and repairs of existing Nurseries.	Extension of Nurseries.	Maintenance and repairs of existing Plantations and Afforestation.	Extension of Plantations and Afforestation.	Maintenance and repairs of existing Groves and Avenues.	Extension of Groves and Avenues.	General Supervising Establishment, including Office Establishment.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Muzaffargarh ...	1893-94	4,020	...	76	...	...	...	3,482	511	...	8,089
	1894-95	2,467	...	72	...	...	...	3,361	296	...	6,196
	1895-96	3,192	...	...	...	...	...	3,386	360	...	6,938
Multan ...	1893-94	8,034	...	613	...	...	...	3,763	...	...	12,410
	1894-95	8,665	...	543	...	...	...	4,032	440	...	13,680
	1895-96	7,858	...	336	...	...	...	4,046	100	...	12,340
Dera Ghási Khan ...	1893-94	5,080	..	70	..	313	...	1,352	...	120	6,935
	1894-95	4,475	...	70	...	344	...	1,352	...	120	6,361
	1895-96	4,848	...	70	...	312	...	1,332	...	120	6,682
Dera Ismail Khan ...	1893-94	512	...	...	71	...	...	4,167	165	...	4,915
	1894-95	507	...	36	148	...	...	4,108	200	...	4,994
	1895-96	520	...	200	...	...	...	3,805	100	60	4,685
Montgomery ...	1893-94	2,178	...	...	...	...	...	653	...	...	2,831
	1894-95	2,354	...	...	...	...	...	922	...	...	3,276
	1895-96	4,987	...	...	...	...	...	662	200	...	5,849
Jhang ..	1893-94	2,424	...	...	...	180	...	1,663	...	180	4,447
	1894-95	1,925	...	...	...	..	...	2,040	...	132	4,097
	1895-96	3,256	...	700	...	101	...	936	...	30	5,023
„ Municipality ...	1893-94	1,448	...	...	...	...	...	405	...	60	1,913
	1894-95	1,095	...	...	...	...	...	395	...	28	1,518
	1895-96	1,246	...	...	...	...	...	332	...	13	1,591
Bannu ...	1893-94	1,478	...	85	..	240	...	1,718	...	627	4,148
	1894-95	1,370	...	...	...	240	...	1,219	...	463	3,292
	1895-96	1,348	...	...	..	240	...	1,886	...	444	3,418
Shahpur ...	1893-94	1,032	312	80	20	...	...	545	5,640	900	8,529
	1894-95	1,116	400	120	5	...	...	720	4,721	872	7,954
	1895-96	1,041	300	80	20	...	...	540	2,379	2,608	6,974
Hissár ...	1893-94	2,670	...	2,496	...	300	200	2,664	...	...	8,330
	1894-95	3,098	...	1,821	...	432	...	2,018	...	...	7,469
	1895-96	2,646	...	1,188	...	...	...	1,854	...	...	5,688
„ Municipality ...	1893-94	4,359	...	...	...	...	...	486	...	...	4,845
	1894-95	1,466	...	...	...	...	...	229	...	...	1,695
	1895-96	1,987	...	...	...	...	...	243	...	...	2,230
Ferozepore ...	1893-94	...	...	...	...	...	...	5,361	300	756	6,417
	1894-95	...	...	...	...	...	...	7,701	...	756	8,457
	1895-96	...	...	...	1,200	...	..	9,727	400	1,116	12,443
Peshawar ...	1893-94	2,262	...	...	...	...	...	8,769	112	...	11,143
	1894-95	2,263	...	...	...	..	...	8,820	575	...	11,658
	1895-96	1,911	...	...	...	...	...	9,033	253	...	11,197

STATEMENT No. VII—*continued.*

1	2	3	4	5	6	7	8	9	10	11	12
		Works.								Establishment.	
		Ornamental Gardens.		*Nurseries.*		*Plantations and Afforestation.*		*Groves and Avenues.*			
District.	Year.	Maintenance and repairs of existing Gardens.	Extension of Gardens.	Maintenance and repairs of existing Nurseries.	Extension of Nurseries.	Maintenance and repairs of existing Plantations and Afforestation.	Extension of Plantations and Afforestation.	Maintenance and repairs of existing Groves and Avenues.	Extension of Groves and Avenues.	General Supervising Establishment, including Office Establishment.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Peshâwar Municipality	1893-94	2,716	...	...	...	...	...	217	...	...	2,933
	1894-95	3,004	...	...	...	...	...	120	...	...	3,124
	1895-96	3,019	...	...	...	...	..	72	...	...	3,091
Kohât ...	1893-94	1,025	...	20	10	...	...	672	274	...	2,001
	1894-95	864	...	65	155	...	...	1,248	1,005	200	3,537
	1895-96	814	...	100	130	...	...	771	559	276	2,650
Rohtak ...	1893-94	...	..	486	203	...	...	4,574	73	88	5,424
	1894-95	...	...	307	...	...	...	3,328	119	80	3,834
	1895-96	...	...	106	...	...	...	4,403	87	...	4,596
Lahore ...	1893-94	4,931	...	...	...	...	...	3,682	2,122	...	10,735
	1894-95	4,103	...	19	...	...	...	1,214	940	2,951	9,227
	1895-96	3,128	...	...	...	..	...	965	...	3,049	7,142
„ Municipality ...	1893-94	17,133	...	24	...	...	...	1,216	...	1,440	19,813
	1894-95	19,998	451	24	...	...	...	2,445	..	120	23,038
	1895-96	19,900	430	16	...	...	...	1,561	...	792	22,699
Karnál ...	1893-94	....	...	488	...	...	...	3,301	...	624	4,413
	1894-95	...	...	657	...	....	...	2,853	30	684	4,224
	1895-96	...	...	591	...	...	...	3,329	210	684	4,814
Jhelum ...	1893-94	3,401	...	...	...	...	...	..	...	2,675	6,076
	1894-95	2,673	74	...	...	...	...	...	...	2,568	5,315
	1895-96	2,917	...	...	...	...	...	...	...	3,080	5,997
Gujránwála ...	1893-94	2,650	160	1,746	...	...	...	3,117	400	432	8,505
	1894-95	2,722	...	878	45	...	...	3,567	1,225	459	8,896
	1895-96	2,751	...	828	...	...	...	4,247	...	429	8,255
Gurgáon ...	1893-94	716	...	1,073	..	608	...	4,526	...	564	7,487
	1894-95	501	...	648	...	1,186	...	4,366	...	684	7,385
	1895-96	668	...	278	...	720	...	3,312	...	...	4,978
Amritsar ...	1893-94	583	...	290	...	...	...	5,292	411	988	7,564
	1894-95	572	...	202	110	...	...	4,889	398	988	7,159
	1895-96	630	...	234	60	...	...	5,289	402	980	7,595
„ Municipality...	1893-94	14,316	...	176	...	47	...	1,474	68	1,464	17,545
	1894-95	11,870	...	292	..	60	...	1,474	200	1,664	15,560
	1895-96	13,908	...	192	...	...	...	1,666	...	1,320	17,086
Delhi ...	1893-94	188	...	229	3	797	47	2,625	133	601	4,623
	1894-95	188	...	220	12	586	13	2,190	92	638	3,939
	1895-96	199	...	182	...	387	2	1,915	320	435	3,440
„ Municipality ...	1893-94	9,098	..	...	..	532	...	1,447	...	..	11,077
	1894-95	9,501	...	.	..	525	.	1,102	...	...	11,128
	1895-96	8,508	..	...		525	...	928	...	...	9,961

STATEMENT No. VII—*continued.*

1	2	3	4	5	6	7	8	9	10	11	12
		Works.								Establishment.	
		Ornamental Gardens.		*Nurseries.*		*Plantations and Afforestation.*		*Groves and Avenues.*			
District.	Year.	Maintenance and repairs of existing Gardens.	Extension of Gardens.	Maintenance and repairs of existing Nurseries.	Extension of Nurseries.	Maintenance and repairs of existing Plantations and Afforestation.	Extension of Plantations and Afforestation.	Maintenance and repairs of existing Groves and Avenues.	Extension of Groves and Avenues.	General Supervising Establishment, including Office Establishment.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Jalandhar ...	1893-94	2,500	...	1,083	...	...	...	3,465	591	...	7,639
	1894-95	2,025	...	1,281	...	80	...	3,687	...	...	7,073
	1895-96	2,220	...	1,169	...	60	...	3,848	...	..	7,297
Ludhiána ...	1893-94	1,450	...	2,993	...	...	...	3,500	...	201	8,144
	1894-95	1,075	...	2,846	...	...	...	2,905	5	108	6,939
	1895-96	2,869	84	..	...	...	...	3,136	20	...	6,109
Ráwalpindi ...	1893-94	1,467	...	...	...	...	...	355	...	...	1,822
	1894-95	1,460	...	...	...	...	...	315	...	...	1,775
	1895-96	1,384	...	...	...	...	...	318	...	...	1,702
Municipality...	1893-94	2,041	...	675	...	...	...	337	...	257	3,310
	1894-95	2,302	...	440	...	...	...	383	...	300	3,425
	1895-96	2,331	...	...	...	...	...	126	...	300	2,757
Gujrát ...	1893-94	955	...	110	...	...	...	...	2,770	480	4,315
	1894-95	1,456	...	107	...	...	...	...	3,430	480	5,473
	1895-96	1,064	...	...	60	...	...	...	3,488	480	5,092
„ Municipality ...	1895-96	342	98	...	...	...	...	...	55	...	495
Gurdáspur ...	1893-94	2,177	...	263	...	...	...	5,685	...	...	8,125
	1894-95	1,937	...	602	...	...	...	5,870	...	...	8,409
	1895-96	2,118	...	298	...	...	...	5,570	...	...	7,986
Ambála ...	1893-94	3,646	...	...	...	...	...	3,600	1,128	...	8,374
	1894-95	3,544	...	...	...	...	...	3,860	...	...	7,404
	1895-96	1,897	...	...	...	...	...	1,736	1,000	...	4,633
Siálkot ...	1893-94	2,904	...	744	...	...	...	2,885	2,554	2,048	11,135
	1894-95	3,097	...	616	...	...	...	3,982	1,820	2,034	11,549
	1895-96	2,835		652	...	...	...	3,511	2,744	2,088	11,830
„ Municipality ...	1895-96	60	...	...	...	...	60	180	...	...	300
Hoshiárpur ...	1893-94	1,191	...	288	...	...	...	5,902	...	380	7,761
	1894-95	1,334	...	288	...	...	...	5,729	...	390	7,741
	1895-96	1,170	...	288	...	...	...	6,733	...	875	9,066
Simla ...	1893-94	5,542	...	801	500	2,047	150	...	...	4,690	13,730
	1894-95	6,402	...	865	...	2,351	200	157	...	5,134	15,109
	1895-96	6,422	...	536	...	1,925	...	...	...	4,757	13,640
Hazára ...	1893-94	120	...	336	...	216	...	72	...	...	744
	1894-95	120	...	306	...	216	...	72	...	...	714
	1895-96	120	...	261	...	216	...	72	...	...	669
„ Municipality ...	1893-94	1,738	...	...	...	...	...	...	...	...	1,738
	1894-95	1,862	...	...	...	...	...	...	...	...	1,862
	1895-96	1,823	...	...	...	...	...	...	...	...	1,823
Káugra ...	1893-94	809	...	310	...	...	...	2,202	318	252	3,891
	1894-95	754	...	...	...	...	...	2,163	...	252	3,169
	1895-96	758	...	...	...	...	...	961	...	252	1,971
„ Municipality ...	1893-94	235	18	...	...	...	...	...	...	281	534
	1894-95	222	...	...	...	...	..	...	...	286	508
	1895-96	242	...	...	...	...	36	...	...	308	586
Total ...	1893-94	1,19,029	490	15,555	807	5,280	397	95,174	17,570	20,108	2,74,410
	1894-95	1,14,987	925	12,826	470	6,020	213	94,836	15,496	22,391	2,68,163
	1895-96	1,18,937	912	8,305	1,470	4,486	98	91,937	12,677	24,496	2,63,318

STATEMENT No. VII—*continued.*

Expenditure on Arboriculture in the Canal Divisions during the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7	8	9	10	11	12
		Works.								Establishment.	
		Ornamental Gardens.		*Nurseries.*		*Plantations and Afforestation.*		*Groves and Avenues.*			
Division.	Year.	Maintenance and repairs of existing Gardens.	Extension of Gardens.	Maintenance and repairs of existing Nurseries.	Extension of Nurseries.	Maintenance and repairs of existing Plantations and Afforestation.	Extension of Plantations and Afforestation.	Maintenance and repairs of existing Groves and Avenues	Extension of Groves and Avenues.	General Supervising Establishment, including Office Establishment.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bári Doáb Canal, 1st Division.	1893-94	...	...	...	...	2,557	981	366	...	...	3,904
	1894-95	...	...	...	...	1,882	1,137	497	...	600	4,116
	1895-96	...	...	...	...	2,056	2,171	...	90	...	4,317
Bári Doáb Canal, 2nd Division.	1893-94	144	...	...	...	1,980	1,734	...	...	...	3,858
	1894-95	100	...	..	...	2,112	...	...	...	...	2,212
	1895-96	136	...	...	...	811	...	...	...	...	947
Bári Doáb Canal, 3rd Division.	1893-94	...	...	...	...	3,405	...	...	...	...	3,405
	1894-95	367	...	...	...	558	...	500	..	...	1,425
	1895-96	...	...	...	...	167	89	102	...	...	358
Upper Sutlej Division, Inundation Canals.	1893-94	...	...	...	...	2,629	...	...	...	...	2,629
	1894-95	...	...	...	...	3,532	...	...	..	...	3,532
	1895-96	...	..	...	...	3,401	...	...	...	...	3,401
Multan Canals Division	1893-94	...	70	66	38	2,343	10	1,898	700	...	5,125
	1894-95	...	...	394	30	1,380	...	2,898	1,838	...	6,540
	1895-96	...	...	420	20	1,500	...	3,542	200	...	5,682
Dera Gházi Khan Division, Indus Canals.	1893-94	...	...	339	...	...	...	2,343	205	18	2,905
	1894-95	...	...	...	...	573	...	1,608	...	44	2,225
	1895-96	...	...	339	...	99	...	1,637	...	18	2,093
Muzaffargarh Canals Division.	1893-94	...	...	...	...	...	...	1,544	...	...	1,544
	1894-95	...	...	...	...	...	...	1,936	...	...	1,936
	1895-96	..	...	...	...	...	...	1,242	...	...	1,242
Western Jumna Canal, Karnál Division.	1893-94	936	659	374	56	63	445	2,058	2,966	...	7,557
	1894-95	1,504	...	1,129	64	...	385	1,953	...	...	5,035
	1895-96	2,680	...	854	...	381	200	1,177	98	...	5,390
Western Jumna Canal, Delhi Division.	1893-94	2,818	...	944	50	235	210	922	801	...	5,980
	1894-95	1,375	...	...	768	1,620	157	287	111	...	4,318
	1895-96	1,809	...	...	...	1,477	...	978	165	...	4,424
Western Jumna Canal, Hissár Division.	1893-94	475	...	421	172	...	242	1,193	2,290	...	4,798
	1894-95	836	...	413	618	...	240	1,451	2,935	76	6,569
	1895-96	498	...	1,046	...	...	278	2,659	1,002	143	5,626
Sirhind Canal, Ferozepore Division.	1893-94	1,034	...	...	170	7,976	2,915	392	46	...	12,533
	1894-95	...	...	...	3	6,769	...	479	...		7,251
	1895-96	...	...	144	...	8,967	952	167	...	...	10,230
Sirhind Canal, Ludhiána Division.	1893-94	...	...	1,058	213	1,648	1,886	1,750	455	...	6,510
	1894-95	...	...	1,170	300	2,840	1,050	1,335	323	...	7,018
	1895-96	...	...	1,620	116	2,002	1,444	1,065	1,070	...	7,317
Sirhind Canal, Patiála Division.	1893-94	...	..	193	...	7,918	...	...	147	...	8,258
	1894-95	...	...	493	...	6,334	65	27	163	...	7,082
	1895-96	...	...	480	...	6,178	501	6	71	...	7,236
Chenáb Canal, 1st Division.	1893-94	...	...	510	...	...	1,054	...	743	965	3,272
	1894-95	...	...	50	...	1,460	908	540	688	..	3,646
	1895-96	...	...	200	100	1,200	1,077	...	666	1,000	4,243
Chenáb Canal, 2nd Division.	1893-94	...	...	...	2,030	...	3,015	...	1,103	...	6,148
	1894-95	...	...	...	3,009	..	2,535	...	2,310	...	7,854
	1895-96	...	...	1,506	432	2,343	4,329	2,506	399	...	11,515
Chenáb Canal, 3rd Division.	1893-94	...	...	...	...	...	...	...	...	...	...
	1894-95	...	...	...	...	...	...	...	...	...	...
	1895-96	...	...	...	...	...	...	...	...	...	...
Chenáb Canal, 4th Division.	1893-94	...	...	...	...	...	690	...	...	...	690
	1894-95	...	32	...	325	...	...	...	..	...	357
	1895-96	...	...	...	...	..	854	...	...	...	854
Swát River Canal Division.	1893-94	...	...	...	...	3,564	...	...	...	...	3,564
	1894-95	...	...	...	...	3,585	...	...	...	...	3,585
	1895-96	...	...	...	...	5,420	...	23	...	...	5,443
Shahpur Canals Division	1893-94	...	...	...	...	...	...	...	...	...	...
	1894 95	...	...	...	...	...	...	...	...	...	...
	1895-96	...	...	...	...	...	...	205	...	...	205
Rohtak Independent Sub-Division.	1893-94 1894-95 1895-96	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Total ...	1893-94	5,407	729	3,905	2,729	34,318	12,682	12,466	9,456	983	82,675
	1894-95	4,182	32	3,649	5,117	32,645	6,477	13,511	8,368	720	74,701
	1895-96	5,123	...	6,609	668	36,002	11,895	15,804	3,761	1,161	80,523

STATEMENT No. VII—*concluded.*

Expenditure on Arboriculture in the Provincial Divisions during the years 1893-94 *to* 1895-96.

1	2	3	4	5	6	7	8	9	10	11	12
		Works.								Establishment.	
		Ornamental Gardens.		*Nurseries.*		*Plantations and Afforestation.*		*Groves and Avenues.*			
Division.	Year.	Maintenance and repairs of existing Gardens.	Extension of Gardens.	Maintenance and repairs of existing Nurseries.	Extension of Nurseries.	Maintenance and repairs of existing Plantations and Afforestation.	Extension of Plantations and Afforestation.	Maintenance and repairs of existing Groves and Avenues.	Extension of Groves and Avenues.	General Supervising Establishment, including Office Establishment.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Peshâwar Division ...	1893-94	...	...	309	...	...	...	2,707	497	2,258	5,771
	1894-95	...	...	725	150	...	...	2,785	1,689	920	6,269
	1895-96	84	...	434	312	...	...	2,388	1,360	821	5,399
Râwalpindi Division ...	1893-94	72	...	180	3	...	...	4,112	95	...	4,462
	1894-95	72	...	240	4	...	...	3,645	168	...	4,129
	1895-96	120	...	240	...	...	...	4,543	100	...	5,003
Kohât North-West Frontier Road Division.	1893-94	..	...	...	216	...	...	1,844	678	...	2,738
	1894-95	...	...	288	296	...	...	1,218	346	...	2,148
	1895-96	...	...	...	...	...	...	1,737	460	...	2,197
Gujránwâla Independent Sub-Division.	1893-94	...	...	...	...	...	...	2,278	...	...	2,278
	1894-95	...	...	...	86	...	...	*2,080	...	...	2,166
	1895-96	...	...	...	45	...	...	2,123	...	...	2,168
Jalandhar Division ...	1893-94	...	...	20	255	...	...	353	669	664	1,961
	1894-95	...	...	...	20	...	...	1,022	495	320	1,857
	1895-96	...	...	153	85	...	...	591	333	330	1,492
Independent Executive charge, Ferozepore.	1893-94	...	...	458	100	...	...	1,546	482	...	2,586
	1894-95	...	...	90	57	...	...	1,671	315	...	2,133
	1895-96	...	...	233	...	...	...	1,274	...	...	1,507
Simla Division ...	1893-94	4,518	...	...	...	...	...	...	...	...	4,518
	1894-95	4,576	...	...	...	...	...	...	...	...	4,576
	1895-96	5,199	...	120	...	500	234	...	...	...	6,053
Ambâla Division ...	1893-94	...	...	...	...	...	...	2,316	...	...	2,316
	1894-95	...	...	...	...	...	...	1,892	...	...	1,892
	1895-96	...	...	...	272	...	...	1,020	249	...	1,541
Delhi Division ...	1893-94	...	...	...	...	...	...	1,660	10	300	1,970
	1894-95	...	...	...	...	...	...	150	...	...	150
	1895-96	..	..	...	...	...	...	1,619	...	...	1,619
Dera Ismail Khan Division.	1893-94	...	...	184	8	...	..	1,857	90	332	2,471
	1894-95	...	...	...	36	...	...	† 891	...	‡ 1,016	1,943
	1895-96	100	62	20	10	681	200	222	3	874	2,172
Dera Ghâzi Khan Division.	1893-94	...	...	30	50	...	...	1,913	447	84	2,524
	1894-95	...	...	30	...	...	...	2,470	210	...	2,710
	1895-96	...	...	30	...	...	...	2,613	...	...	2,643
Lahore Division ...	1893-94	247	48	150	155	...	...	4,340	520	...	5,460
	1894-95	288	...	200	90	...	...	4,332	149	...	5,059
	1895-96	288	...	200	60	...	...	3,328	100	...	3,976
Amritsar Division ...	1893-94	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
	1894-95										
	1895-96										
Multân Division ...	1893-94	...	...	78	60	...	...	1,107	72	115	1,432
	1894-95	...	...	80	...	...	...	1,508	180	160	1,928
	1895-96	...	...	91	..	...	...	1,722	9	79	1,892
Total ...	1893-94	4,837	48	1,409	847	...	...	26,033	3,560	3,753	40,487
	1894-95	4,936	...	1,653	739	...	...	23,664	3,552	2,416	36,960
	1895-96	5,791	62	1,521	784	1,181	434	23,180	2,614	2,095	37,662

* Rs. 86 transferred from Column 9 to Column 6.
† Rs. 868 omitted in the annual statement.
‡ Rs. 1,016 omitted in the annual statement

APPENDIX I.

Statement of trees counted at the close of 1895-96 *in certain Canal Divisions.*

Canal or Branch.	Number of trees.															Total.			Grand Total.	Bamboo clumps.
	Shisham.			*Kikar.*			*Tún.*			*Mango.*			*Others.*			Classes.				
	Classes.			Classes.			Classes.			Classes.			Classes.							
	I.	II	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Bari Doab Canal, 1st Division.																				
1. Main Line	13,956	12,198	25,296	1,072	2,496	5,474	1,756	893	1,031	361	212	435	14,493	15,416	32,049	31,638	31,215	64,285	127,138	356
2. Main Branch Upper ...	1,318	7,103	4,677	21	134	264	12	30	16	2	91	243	584	3,308	5,636	1,937	10,666	10,836	23,439	17
3. Kasúr Branch	119	8,280	25,018	86	2,337	5,883	...	...	1	...	5	97	43	3,315	9,989	248	13,937	40,988	55,173	1
4. Sobráon Branch ...	186	659	13,761	105	3,459	7,198	...	3	...	...	...	33	17	1,243	9,356	308	5,364	30,348	36,020	...
5. Distributaries	1,687	1,881	2,452	320	667	2,211	244	263	118	221	607	382	1,787	1,748	2,404	4,259	5,166	7,567	16,992	58
6. Escapes	4	...	2	3	1	2	...	...	...	...	...	...	9	8	98	16	9	102	127	...
7. Miscellaneous	244	312	512	15	32	45	34	52	88	40	123	285	235	356	940	568	875	1,870	3,313	...
Total 1896 ...	17,514	30,433	71,718	1,622	9,126	21,077	2,046	1,241	1,254	624	1,038	1,475	17,168	25,394	60,472	38,974	67,232	155,996	262,202	432
Canal.																				
Bari Doab Canal, 2nd Division.																				
Main Branch Lower ...	1,042	4,472	5,610	62	479	1,335	1	24	30	1	20	4	106	998	1,765	1,212	5,993	8,744	15,949	...
Lahore Branch	2,814	11,098	9,419	852	2,734	4,782	...	7	...	8	28	234	1,938	6,286	9,443	5,612	20,153	23,878	49,643	23
Main Branch Upper	21	34	32	2	2	5	...	1	42	...	...	...	1	9	34	24	46	113	183	...
Distributaries.																				
Main Branch Lower ...	165	293	166	18	192	684	...	...	...	2	24	41	32	121	575	217	630	1,466	2,[illegible]	...
Lahore Branch	2,115	3,885	2,283	1,080	2,895	3,986	2	1	3	2	12	70	2,131	4,897	3,943	5,330	11,190	10,285	26,[illegible]	1
Kirn Escape	60	311	84	22	1,201	665	...	...	...	...	...	...	20	322	160	102	1,834	909	2,[illegible]	...
Shálamár	...	1	4	...	22	64	...	...	...	...	...	...	...	...	...	...	23	68	91	...
Niáz Beg	...	40	257	...	4	51	...	...	...	...	...	...	...	24	64	...	68	372	440	..
Total 1896 ...	6,217	20,134	17,855	2,036	7,529	11,572	3	33	75	13	84	349	4,228	12,157	15,984	12,497	39,937	45,835	98,269	24
Total 1893 ...	7,102	33,239	20,334	2,904	8,814	9,109	9	9	9	34	161	144	3,243	10,112	12,453	13,292	52,335	42,049	107,676	19
Increase or decrease ...	−885	−13,105	−2,479	−868	−1,285	+2,463	−6	+24	+66	−21	−77	+205	+985	+2,045	+3,531	−795	−12,398	+3,786	−9,407	+5

APPENDIX I—*continued.*

Statement of trees counted at the close of 1895-96 *in certain Canal Divisions*—continued.

Canal or Branch.	Number of trees.															Total.			Grand Total.	Bamboo clumps.
	Shísham.			*Kíkar.*			*Tún.*			*Mango.*			*Others.*			Classes.				
	Classes.			Classes.			Classes.			Classes.			Classes.							
	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	20	21
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
Bari Doab Canal, 3rd Division.																				
Main Branch Lower.																				
Canal	3,502	19,187	33,681	554	3,841	11,301	8	48	179	..	51	155	739	3,835	13,814	4,803	26,962	59,130	90,895	21
Distributaries	70	833	1,009	314	2,310	5,119	...	44	25	...	6	4	62	852	2,510	446	4,105	8,667	13,218	...
Vahu Escape	14	332	1,167	7	26	47	...	...	...	...	...	...	11	71	642	32	429	1,856	2,317	...
Total ...	3,586	20,412	35,857	875	6,177	16,467	8	92	204	...	57	159	812	4,758	16,966	5,281	31,496	69,653	106,430	21
																Last count			98,027	
																Increase			8,403	
Upper Sutlej Division, Inundation Canal.																				
Main Canal and Branches.																				
Katora Canal	26	97	683	312	3,003	19,800	...	...	...	...	...	36	167	710	10,703	505	4,800	31,223	36,527	...
Khánwah Canal	155	278	819	3,858	9,234	7,440	...	...	...	...	3	8	660	1,567	1,698	4,673	11,082	9,965	25,720	54
Upper Sohág Canal	119	324	361	907	5,140	9,782	...	...	...	...	...	...	22	997	8,519	1,048	6,461	18,662	26,171	76
Lower Sohág and Pára Canal	...	8	110	20	100	600	...	...	...	...	...	10	...	307	608	20	415	1,328	1,763	...
Sohág Branch	...	...	78	...	12	351	...	...	...	...	...	5	...	365	2,973	...	377	3,407	3,784	...
Pára Branch	...	...	61	...	38	147	...	...	...	...	...	...	..	309	3,862	...	347	4,079	4,417	...
Total ...	300	707	2,112	5,097	18,517	38,120	...	...	...	...	3	59	849	4,255	28,363	6,246	23,482	68,654	98,382	130
Distributaries.																				
Attári Rájbaha	71	75	68	222	443	1,475	...	...	...	...	...	...	...	447	1,377	293	965	2,920	4,178	...
Chunián „	...	...	...	13	77	319	...	...	...	...	...	...	23	129	508	36	206	827	1,069	...
Pakhoki „	...	10	2	...	138	450	...	...	...	...	...	...	...	70	225	...	218	677	895	...
Haveli „	...	...	...	...	3	90	...	...	...	...	...	...	...	...	...	...	3	90	93	...
Bhuman Shah Rájbaha ...	...	...	...	...	27	...	...	...	...	...	...	...	...	...	..	...	27	...	27	...

Músewál Rájbaha	...	...	...	...	...	10	193	...	...	...	...	...	...	...	23	670	...	33	863	896	...
Pákpattan „	...	...	...	...	...	30	308	...	...	...	...	...	...	1	104	459	1	134	767	902	...
North „	2	84	33	21	1,101	925	...	...	...	...	...	...	127	234	350	150	1,419	1,308	2,877	...
South „	6	130	53	575	1,235	713	...	...	...	...	...	...	134	305	360	715	1,670	1,126	3,511	...
Bunga Shah „	...	5	6	48	413	436	...	...	...	...	...	...	...	19	50	48	437	492	977	...
Bapparwál „	...	...	30	65	435	1,776	...	...	...	...	...	...	1	384	418	66	819	2,224	3,109	...
Mári Minor „	...	..	...	...	3	60	...	...	...	...	...	...	...	...	...	...	3	60	68	...
Fáridpur „	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	3	3	...
Total Distributaries ...	79	304	192	944	3,915	6,748	...	...	...	...	...	...	286	1,715	4,417	1,309	5,934	11,357	16,600	...
Grand Total ...	379	1,011	2,304	6,041	22,432	44,868	...	..	...	...	3	59	1,135	5,970	32,780	7,555	29,416	80,011	116,982	130
1892-93 ...	151	1,550	5,161	3,258	32,423	39,770	...	...	...	...	1	34	1,843	13,045	46,155	5,252	47,019	91,120	143,391	130
Increase	228	...	...	2,783	...	5,038	...	...	...	...	2	25	...	...	...	2,303	...	...	...	...
Decrease	...	539	2,857	...	9,991	...	...	...	...	...	...	...	708	7,075	13,375	...	17,603	11,100	26,409	...
1st Division, Chenab Canal.																							
Khanki Station	...	...	300	...	...	354	...	...	...	...	...	...	...	...	33	...	...	687	687	...
Left Protection Bund ...	...	...	...	...	...	6	...	...	...	...	...	...	...	...	2	...	...	8	8	...
Main Line, right bank, mile 1 to 24	...	23	3,346	...	17	4,328	...	...	...	...	...	...	...	...	7	...	40	7,681	7,721	...
Escape, Chenáwán	...	42	1,234	...	7	2,128	...	...	...	...	...	...	...	...	...	...	49	3,362	3,411	...
Old Supply	...	4	3,539	...	7	3,116	...	..	...	...	...	...	...	...	...	...	11	6,655	6,666	...
Kot Nikka Branch	...	397	2,889	...	431	2,324	...	...	...	...	...	...	1	139	103	1	967	5,316	6,284	...
Jhandoki Rájbaha	...	159	691	2	59	275	...	...	...	..	...	...	...	1	198	2	219	1,164	1,385	...
Medora „	...	...	412	...	...	10	...	...	...	...	...	...	...	...	4	...	...	426	426	...
Vániki „	...	...	...	2	92	364	...	...	...	...	...	...	2	2	25	4	94	389	487	...
Chowki Compound	...	29	674	...	32	240	...	...	6	...	...	2	...	44	328	...	105	1,250	1,355	...
Total ...	...	654	13,085	4	645	13,145	...	...	6	...	...	2	3	186	700	7	1,485	26,938	28,430	...
2nd Division, Chenab Canal.																							
Gujránwála	...	...	1,403	...	...	48	...	...	...	...	...	...	...	...	8	...	...	1,459	1,459	...
Jhang	...	...	35	...	...	1	...	...	...	...	...	...	...	..	...	...	...	36	36	...
Total ...	...	...	1,438	...	...	49	...	...	...	..	...	...	...	...	8	...	...	1,495	1,495	...

APPENDIX I—*concluded.*

Statement of trees counted in 1895-96 in certain Canal Divisions—concluded.

	Number of trees.																					Grand Total.	*Remarks.
	Shisham.			*Kikar.*			*Tún.*			*Mulberry.*			*Persian Lilac.*			*Others.*			Total by Classes.				
	Classes.			Classes.			Classes.			Classes.			Classes.			Classes.							
	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.		
Swat River Canal Division.																							
Plantations	...	197	8,506	...	34	284	...	...	27	...	29	413	...	...	46	...	5	99	...	265	9,375	9,640	Some 12,000 trees were cut down during the year 1895-96.
Avenues, Main Canal ...	1	481	5,407	...	...	92	...	...	...	...	114	204	...	48	145	...	...	8	1	643	5,856	6,500	
Do., Distributaries ...	...	1,465	50,037	...	42	409	...	...	77	...	3	395	...	...	185	...	...	1,015	...	1,450	52,118	53,568	
Do., Roads	...	111	6,361	...	...	9	...	...	...	...	8	68	...	1	3	...	19	13	...	139	6,394	6,533	
Total 1895-96 ...	1	2,194	70,251	...	76	794	...	...	104	...	154	1,080	...	49	379	...	24	1,135	1	2,497	73,743	76,241	
Total 1892-93 ..	...	...	48,235	...	...	1,198	...	...	287	...	...	1,658	...	...	...	...	...	2,048	...	...	53,426	53,426	
Increase or Decrease ...	1	2,194	22,016	...	76	404	...	...	183	...	154	578	...	49	379	...	24	913	1	2,497	20,317	22,815	